GE
Security

Telligence Patient-Staff Communications System

Operation Manual

P/N 3101050 • REV 1.0 • 21SEP06

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Document number: 3101050 Revision: 1.0

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You are cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Important information

Regulatory issues

Telligence units comply with UL and CAN/ULC and are listed to both US and Canadian requirements. The products will also comply with the emissions rules of the Federal Communications Commission (FCC) and Industry Canada. Check with local and state codes for the required regulations in your area.

The Telligence System has been designed and pre-tested under standardized testing conditions to not react to ESD phenomena.

The supplemental equipment that can be added to this system may be separately listed per any of the following standards or categories:

- UL 114 Office Appliances and Business Equipment
- UL 478 Electronic Data Processing Equipment
- UL 1950 Information Technology Equipment including Electrical Business Equipment
- UL 60950 Information Technology Equipment
- UL 544 Medical and Dental Equipment
- UL 60601-1 Medical Electrical Equipment
- UL 217 Single and Multiple Station Smoke Alarms
- UL 268 Smoke Detectors for Fire Protective Signaling Systems
- UL 1778 Uninterruptible Power Supply Equipment

The Telligence Patient-Staff Communication System can be connected to supervised smoke detectors and fire alarm systems only. Any fire alarm signal annunciated by the Telligence System is considered supplemental only. The Telligence System is not, and shall not be considered, a primary fire alarm system.

Industry Canada compliance statement

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus,” ICES-003 of Industry Canada.

Chapter 1
General information

Summary

This chapter briefly introduces the Telligence Patient-Staff Communication System. This includes a brief description of the basic types of equipment and software available for Telligence systems, and a first look at how Telligence helps patients and staff members perform basic functions. This chapter also lists additional documents that may be useful to you and gives the telephone number for contacting the GE Security technical support team.

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Introduction

Basic equipment types

The Telligence system includes three fundamental equipment types:

- Equipment for monitoring and responding to calls
- Equipment for calling the nursing station
- Additional equipment that supports the overall nurse call system

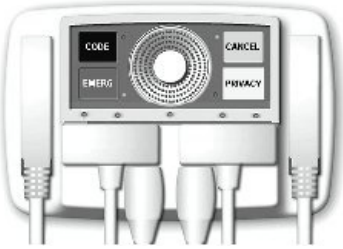
Equipment for monitoring and responding to calls

Staff consoles allow nursing station staff to monitor active calls, and to place and respond to calls from patients and staff. Staff consoles are also used to configure call priorities for individual staff and patient stations.

Figure 1: Staff console (left), and annunciator (right)

Wall-mounted annunciators can provide the same functionality in areas such as staff rooms and PBX rooms that are located some distance from the nursing station.

Figure 2: Smart patient station



Equipment for calling the nursing station

Staff and patients can contact the station using a variety of audio-equipped and nonaudio-equipped stations. Smart patient stations like the one shown at left are mounted near beds in patient rooms. They provide receptacles for pillow speakers, call cords, and electronic bed control panels, which allow patients to call the nursing unit from a bed or chair.

Figure 3: Smart staff/duty station

Staff members use the patient station call buttons to call the nursing station or to signal a code blue or staff emergency. Patient stations have built-in speakers and microphones for two-way voice communication.

Staff and patient rooms may also be equipped with smart staff/duty stations like the one shown at left. These devices have call buttons that allow staff members to signal the nursing station for assistance, or to signal code blue or staff emergencies. Like patient stations, staff/duty stations are audio-equipped, supporting two-way voice communication.

A number of peripheral nonaudio-equipped communication stations may also be installed. These include code blue stations, staff emergency stations, lavatory stations and others. Lavatory stations provide receptacles for pull cords, so that patients can call for help from the lavatory or shower. Peripheral stations do not support voice communication.

Finally, patient stations and call stations with equipment receptacles allow critical equipment to be connected and monitored by the nurse call system.

Additional equipment

Corridor lights are installed outside patient rooms or at the entrance to duty areas to show which rooms need assistance. Some models also sound a buzzer, and most models can flash multiple lights simultaneously. The flash rate and color can be used to indicate the call priority, the staff levels whose assistance is needed, and other information.

Presence stations installed near doorways are used by nursing staff to register their location as they move about the facility. Presence stations can also be used to indicate the presence of visitors, physicians, and so forth.

A computer running Telligence or PC Connect applications may also be available. Depending on the system components installed at your facility, you may have access to one or more of the following software applications:

Table 1 Software available for Telligence systems

Application	Description
PC Assignments	Used to create shifts, assign pocket pagers to staff members, and assign staff members to patient beds.
PC Messaging	Used for sending text messages to other staff members.
PC Reporting (ARMS ip)	Used for generating reports based on nurse call data, and for maintaining a permanent record of nurse call activity.
NetBoard	Replaces the whiteboards that were traditionally used to record room assignments and other patient data.

List View client	Displays a list of nurse calls and reminders in order of priority, and provides quick access to details about each call.
Map View client	Displays nurse call activity and staff presence on a map of the nursing unit.

Basic system functions

Calls to the nurses' station

Patient calls

Patients can call the nursing station from a bed or chair using pillow speakers, call cords, or buttons on electronic bed control panels. These devices are connected to patient stations mounted on the wall near the bed.

Call cord stations and lavatory stations allow patients to call for assistance from the lavatory or shower.

Staff calls

From patient or staff rooms you can call the nursing station by pressing buttons on audio stations, or from a range of peripheral nurse call stations.

Call answering and initiation

While in the nursing station, you can answer or initiate calls to patients, staff, and other nursing stations using the primary staff console. You can perform the same tasks in staff rooms equipped with wall-mounted annunciators.

Reminders

You can set reminders for calls that cannot be immediately addressed. Requests of any call priority (i.e., ranging from room alarm and code blue down through normal priority) can be placed on reminder. Nurse call priority names are abbreviated in the reminder list.

Configuration settings

Priority levels for specific call types

Specific priority levels are applied to specific types of calls. For example, calls sent by pressing the nurse call button on a pillow speaker have a lower priority than calls sent by pressing the Staff Emergency button on a patient station. The labels and priority levels given to specific call types are determined locally and applied to individual patient stations. You can set priority levels for call types from the ESM host server, or from a computer connected to the Telligence network. For more information on configuring call priorities, see "Configuring call priorities for a staff or patient station" on page 32.

Patient privacy

The Health Insurance Portability & Accountability Act (HIPAA) dictates strict requirements for maintaining the security and confidentiality of patient health information. For more information on privacy settings, see "Handset and speakerphone" on page 10, and "Placing the patient station in privacy mode" on page 60.

Coverage areas

Nursing duty areas are grouped to form specific nurse call coverage areas within nursing units. Each coverage area is served by a network of nurse call devices and a staff console, to which all nurse calls within the coverage area report. This is called the primary staff console.

Calls from monitored equipment

The staff console can oversee or *supervise* the communication function of another staff console, annunciator, staff or patient station, or peripheral device. If the device under supervision should lose its ability to communicate, the system sends an error message to every staff console and annunciator that has supervision or failure coverage for that duty area.

Registration of staff presence

Caregivers can show where they are located by pressing a button on staff presence stations installed near the doorways of patient and staff rooms.

Staff presence data is used with the Staff Follow function. This function provides a method of alerting caregivers as they move about the nursing unit. Staff follow can be configured per room to tone for either calls in the same duty area or calls covered by the same primary staff console.

As a staff member enters a room, he or she presses a button on the presence station. If a call has come in from the configured coverage area, the patient station or staff station in the room emits a tone.

Related documentation

The manuals and online help systems listed in the following table supply additional information that you may find useful.

Note: Map View Client and List View Client user documentation consists only of online help documentation.

Table 2: Sources of additional information

Model	Description	Document	Document Number
439-0021	PC Reporting (ARMS ip)	ARMS ip User Guide	427-07-00053

Table 2: Sources of additional information

Model	Description	Document	Document Number
		ARMS ip Administrator Guide	427-07-00054
		ARMS ip Quick Start Guide	427-07-00066
439-0028/29	PC Assignments	User Guide	3100800
		Supervisor Guide	3100801
439-0032	PC Messaging	User Guide	3100802
439-0034/35/36/37	NetBoard	NetBoard User Guide	3100855
	List View and Map View	Online help system	427-22-00038

Technical support

If you need technical support for any Telligence System device, contact the GE Security Technical Services Department at 1-866-226-2126, from 8:00 a.m. to 5:00 p.m., Eastern Standard Time.

Chapter 2
Overview of the ColorTouch Staff Console and Annunciator

Summary

The equipment used to monitor and respond to nurse calls is the ColorTouch VoIP Staff Console and the ColorTouch VoIP Annunciator. This chapter introduces the basic features of these devices. For instructions on using staff consoles and annunciators, see Chapter 3 "Using staff consoles and annunciators" starting on page 21.

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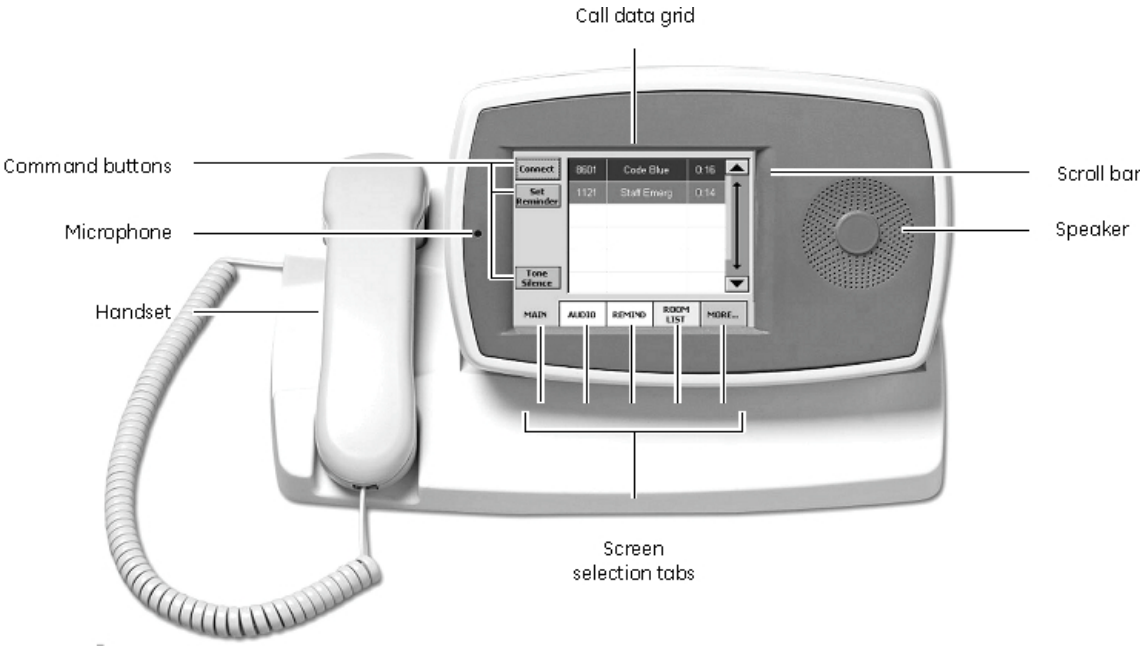
The ColorTouch VoIP Staff Console

The staff console used in the Telligence system is the ColorTouch VoIP Staff Console (model HC-CONSOLE).

Figure 4: ColorTouch VoIP Staff Console (model HC-CONSOLE)



The staff console is the primary call center of the patient-staff communication system. Typically placed in nursing stations, staff consoles are used for the following tasks:

- Answering calls
- Setting call reminders
- Upgrading calls to higher priorities
- Placing calls to patients and staff
- Speaking with staff members at other staff consoles or annunciators
- Configuring call priorities for individual staff and patient stations

Handset and speakerphone

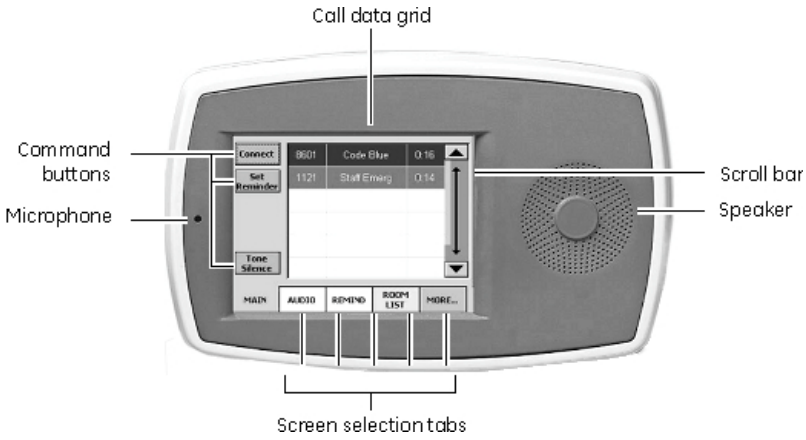
The staff console includes a standard telephone handset and cradle — for use where patient information can easily be overheard — and a speaker and microphone for hands-free operation in more private areas.

Both the handset and speaker phone are full duplex. This means that you will be able to hear the caller's voice even while you are speaking.

The ColorTouch VoIP Annunciator

The annunciator used in the Telligence system is the ColorTouch Annunciator (model HC-ANN).

Figure 5: Model HC-ANNUN ColorTouch VoIP Annunciator)



The annunciator is a wall-mounted device similar to the staff console. Annunciators are typically located in staff rooms, PBX rooms, or other locations some distance from the nurses' station. Depending on how it is configured, the annunciator can be used to perform the same tasks as the staff console. The annunciator typically plays a supporting role.

Annunciators can be set to display nurse call activity or to supervise other devices. Annunciators are best used in locations where sensitive patient information cannot easily be overheard by visitors and other members of the public.

Shared features and functions

ColorTouch monitor

Both the staff console and the annunciator display information on a touch screen. You can work with nurse calls and perform other functions by lightly touching command buttons on the screen.

Staff consoles and annunciators sound a tone to alert you when new calls are received and when reminders expire. The volume can be adjusted and the alert tone can be silenced temporarily — the tone will be automatically re-energized when the next call comes in or when a preset maximum time elapses, whichever comes first. While you can change the alert tone volume, it is not possible to turn alert tones off.

The staff console and the annunciator only annunciate calls from covered duty areas. If not configured to cover any duty areas, no calls will be annunciated.

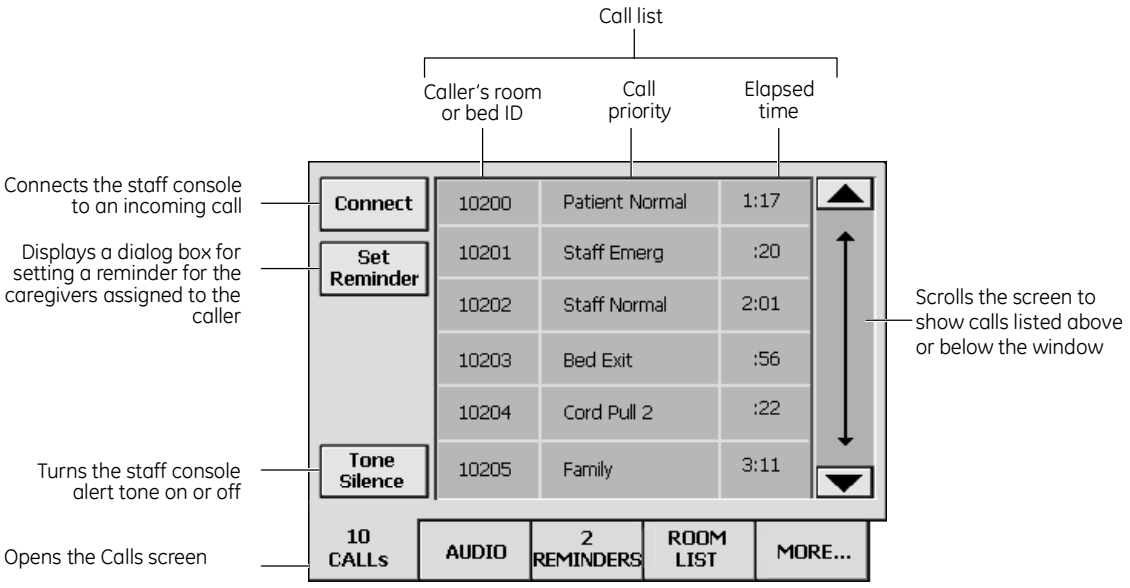
Screens displayed on staff consoles and annunciators

Staff consoles and annunciators display five separate pages or *screens* — the Call screen, Audio screen, Reminders screen, Room List, and Admin screen. This section shows the types of information displayed on each screen, how to find the screen you need, and how to use the command buttons and other controls found on each.

The Call screen

The Call screen lists incoming calls in order of priority and is the default screen. It is used for monitoring and answering nurse calls.

Figure 6: The Call screen


Call list
Caller's room or bed ID
Call priority
Elapsed time
Connects the staff console to an incoming call
Displays a dialog box for setting a reminder for the caregivers assigned to the caller
Turns the staff console alert tone on or off
Opens the Calls screen
Scrolls the screen to show calls listed above or below the window
Connect
Set Reminder
Tone Silence
10200 Patient Normal 1:17
10201 Staff Emerg :20
10202 Staff Normal 2:01
10203 Bed Exit :56
10204 Cord Pull 2 :22
10205 Family 3:11
10 CALLs
AUDIO
2 REMINDERS
ROOM LIST
MORE...

The Call screen displays the following information for each call:

- Name of the room or bed where the call was placed
- Call priority
- Time elapsed since the call was made or recalled from reminder

In addition to calls from patients and staff, the Call screen lists the following items, as well:

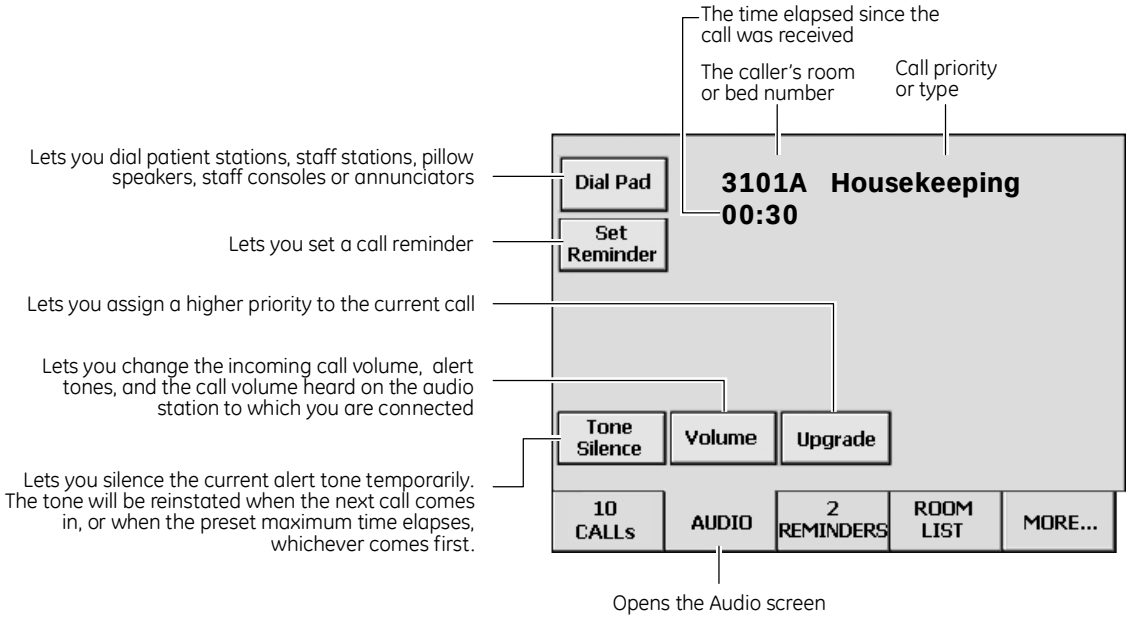
- System calls generated when a call reminder times out
- System calls generated by alarm conditions of medical equipment that is connected to the nurse call system
- Error messages generated by communication failure of supervised nurse call system devices

Instructions for using the Call screen is found in Chapter 3 "Using staff consoles and annunciators" starting on page 21.

The Audio screen

The Audio screen is displayed when you answer a call. You can use this screen to upgrade the call to a higher priority, set a reminder, dial a room or bed number to place a new call, and adjust the volume on the staff console or on the staff or patient station to which you are connected.

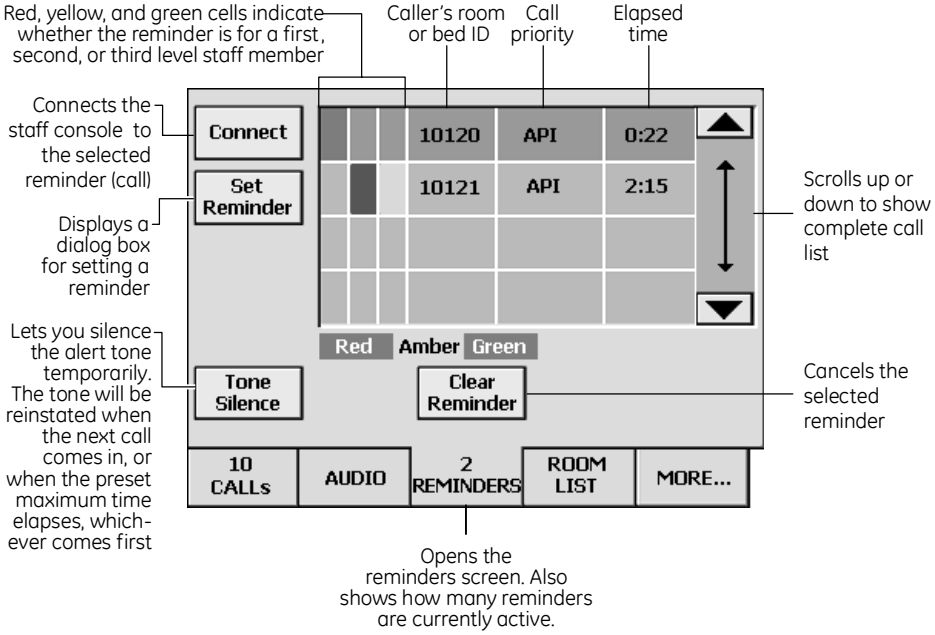
Figure 7: Command buttons on the Audio screen


The time elapsed since the call was received
The caller's room or bed number
Call priority or type
Lets you dial patient stations, staff stations, pillow speakers, staff consoles or annunciators
Dial Pad
3101A Housekeeping
00:30
Lets you set a call reminder
Set Reminder
Lets you assign a higher priority to the current call
Lets you change the incoming call volume, alert tones, and the call volume heard on the audio station to which you are connected
Tone Silence
Volume
Upgrade
Lets you silence the current alert tone temporarily. The tone will be reinstated when the next call comes in, or when the preset maximum time elapses, whichever comes first.
10 CALLs
AUDIO
2 REMINDERS
ROOM LIST
MORE...
Opens the Audio screen

Reminders screen

The Reminders screen lists calls for which reminders have been set. Each reminder shows the staff level (for example, RN, LPN, or aide) whose assistance is needed.

Figure 8: The reminder screen


Red, yellow, and green cells indicate whether the reminder is for a first, second, or third level staff member
Caller's room or bed ID
Call priority
Elapsed time
Connects the staff console to the selected reminder (call)
Connect
Set Reminder
Displays a dialog box for setting a reminder
10120
API
0:22
10121
API
2:15
Scrolls up or down to show complete call list
Red
Amber
Green
Lets you silence the alert tone temporarily. The tone will be reinstated when the next call comes in, or when the preset maximum time elapses, whichever comes first
Tone Silence
Clear Reminder
Cancels the selected reminder
10 CALLs
AUDIO
2 REMINDERS
ROOM LIST
MORE...
Opens the reminders screen. Also shows how many reminders are currently active.

You can perform the following tasks from the Reminders screen:

- Set a reminder for the caller's assigned caregivers

ote: Call priority labels are configurable. The labels shown on your system may differ from those shown here.

- Add caregivers to a reminder that has already been set
- Clear reminders set for normal priority calls

Note: Only normal priority calls can be cleared from the staff console. Higher priority calls must be cleared from the station where the call originated.

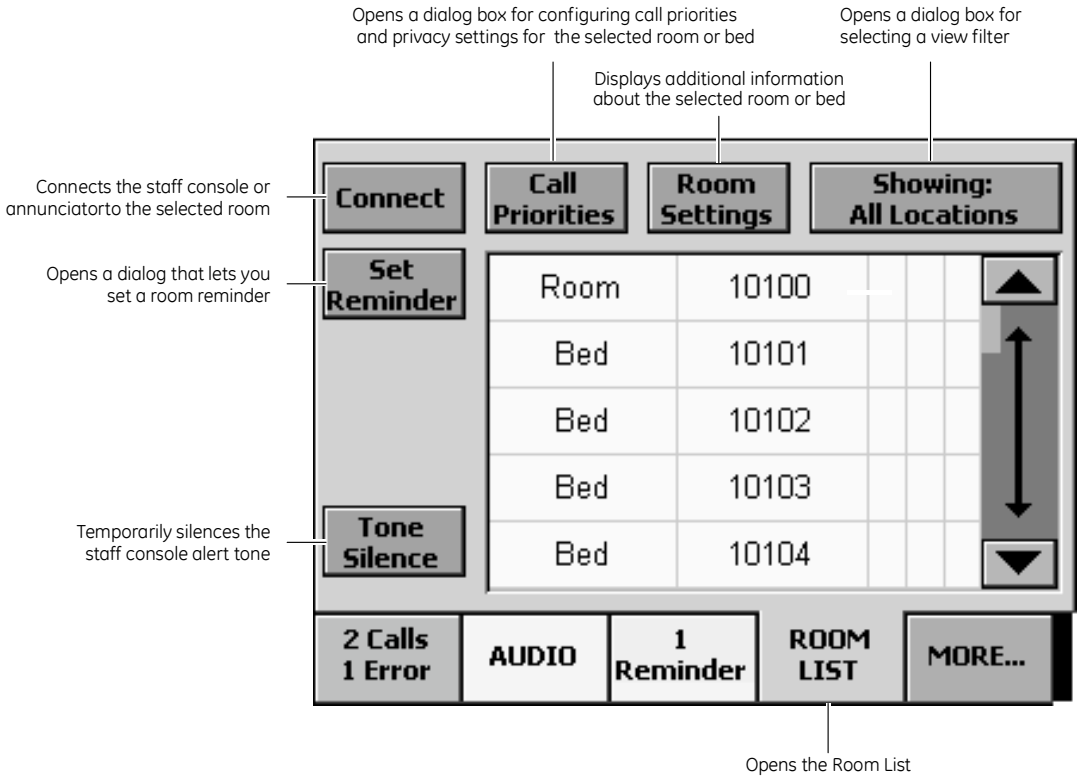
Reminders are displayed in order of priority and elapsed time since the reminder was set.

Room List screen

The Room List screen is used mainly for placing calls to patients or staff. You can call a room or a bed. This screen also allows you to specify call priority settings for specific rooms and beds.

Room/Bed list

Figure 9: Room List screen features

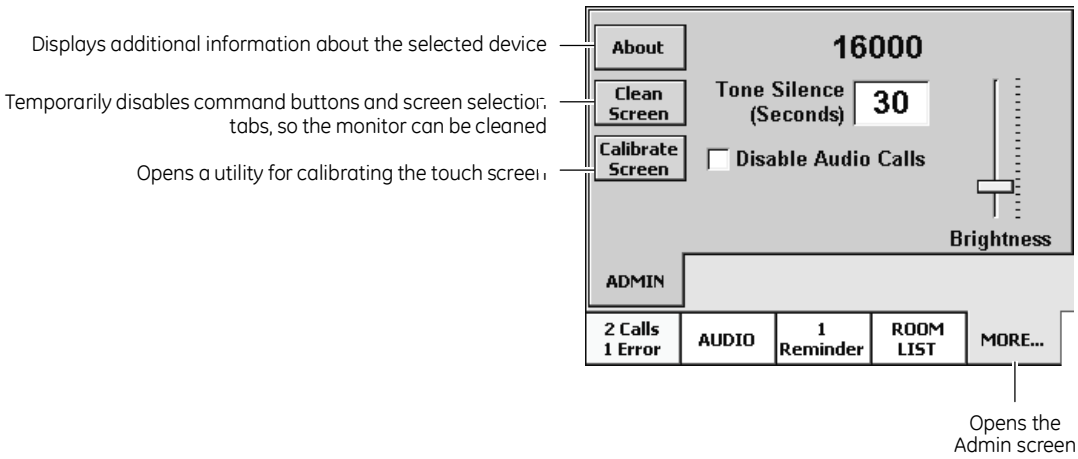

Opens a dialog box for configuring call priorities and privacy settings for the selected room or bed
Opens a dialog box for selecting a view filter
Displays additional information about the selected room or bed
Connects the staff console or annunciatorto the selected room
Opens a dialog that lets you set a room reminder
Temporarily silences the staff console alert tone
Connect
Call Priorities
Room Settings
Showing: All Locations
Set Reminder
Tone Silence
Room 10100
Bed 10101
Bed 10102
Bed 10103
Bed 10104
2 Calls 1 Error
AUDIO
1 Reminder
ROOM LIST
MORE...
Opens the Room List

Admin screen

The Admin screen is displayed when you press the More tab. The Admin screen lets you calibrate staff console and annunciator touch screens on demand so screen elements can be touched with

precision and accuracy. The Admin screen also lets you place staff consoles and annunciators in cleaning mode.

Figure 10: Admin screen



- Disable Audio Calls
  This setting is found only on annunciators, where it is used to prevent an emergency annunciator from being used as a call device

The setting blocks outbound calls made on this device.

- Tone Silence (Seconds)
  This setting determines the maximum length of time tones can be silenced. Tones are automatically reinstated on the staff console when this time elapses, or when a new call is received, whichever comes first.

Device supervision

A staff console or annunciator can oversee or *supervise* the communication function of another staff console or annunciator or of other nurse call devices. In this mode, if the supervised device loses its ability to communicate, the staff console or annunciator generates an error message identifying the device in trouble.

Complementary equipment

At many facilities, the functionality offered by the staff console and annunciator is complemented by one or more computer-based applications. These applications are listed in the available software table that appears on page 3. Software supporting the Telligence system runs on a computer placed near the staff console, or elsewhere on the Telligence network. The related documentation table on page 6 lists the help files and user guides provided with these applications.

Configuration settings for staff consoles and annunciators

Templates and coverage modes

Two settings control basic functioning for staff consoles and annunciators: templates and coverage modes.

- Templates determine whether the device will run as a call center, a general-purpose annunciator, or as an emergency annunciator.
- Coverage modes further define device function

The following sections describe these settings.

Templates

Staff console template (call center): The staff console template sets the device to run as the primary call center for the nurse call system. This is the default template for the ColorTouch VoIP Staff Console.

Unit annunciator template (general purpose annunciator): Devices running as unit annunciators can display all calls from the stations assigned to them. All displayed nurse calls can be answered from annunciators configured this way. This template is used for most purposes and is the default setting for the ColorTouch VoIP Annunciator.

Emergency annunciator template: By default, devices running as emergency annunciators display calls of only the four highest priorities. This includes the following call priorities:

- Room alarm
- Room alarm 2
- Code blue

Call priority labels are configurable. The labels used for call priorities on your system may differ from those shown here.

- Code pink

This setting is configurable, however. Emergency annunciators can be set to display any call priority.

Coverage modes

Staff consoles and annunciators are further configured with settings that determine the type of coverage they will provide: *primary*, *annunciate*, *supervision*, and *failure*.

Primary versus annunciate coverage: Each staff console or annunciator is set for either *primary* or *annunciate* mode.

- The *primary* coverage device serves as the primary call center for the duty areas assigned to it. Each network must have at least one *primary* device to which all nurse calls are directed.
- Devices configured for annunciate mode provide backup coverage for the area to which they are assigned. This allows staff members to view and answer calls from locations other than the nursing station.

Supervision and failure coverage: S*upervision* and *failure* coverage modes are used for monitoring critical nurse call equipment. Either setting can be applied to devices configured either as primary or as annunciate.

- In supervision mode, the device monitors the communication function of *staff consoles* or *annunciators*. If a device loses communication, an error message is sent to the staff console. Devices operating solely in supervisory mode do not annunciate patient calls. Instead they signal the failure of the staff consoles and annunciators assigned to them. Devices can be set to provide supervision in addition to displaying nurse calls.
- In failure mode, the device monitors patient stations, staff stations, and peripheral devices for power or data signal failure. Devices operating solely in failure mode do not annunciate patient calls. Instead they signal the failure of the devices assigned to them. This mode can be assigned in addition to either primary or annunciate, however, which makes it possible to display nurse calls and device failure notifications on the same device.

To avoid sending error codes for momentary interruptions of service, a delay can be applied to supervision and failure mode. By default, the system waits for 1 minute before sending an error code to the staff console. This delay is configurable. It can be removed or set as high as 300 minutes. See the installation manual provided with your Telligence system *3101010 R1.0 Telligence Patient-Staff Communications System Installation Manual*.

Overview of nurse call alerts at the staff console

Staff consoles and annunciators display only the types of calls (call priorities) that have been assigned to them. By default, they display the nurse call types, shown in Table 3, below. Both sound and color are used to show the priority of each call. The table indicates the color of the nurse call row, how fast an alert tone may sound at the staff console or annunciator, and whether a nurse call is automatically put on reminder or cleared when a staff member answers it.

Notes

- By default, emergency annunciators show nurse calls for extreme emergencies only.
- Call priority labels are configurable. The labels used for call priorities on your system may differ from those shown here.
- Housekeeping calls are not typically displayed at the staff console. The system can be configured to display these calls, however.

Table 3: Nurse call signaling at the staff console or annunciator

Nurse call priority type [1]	Staff console row/cell color	Tone repeat rate	Connect response
Room alarm (2)	Red	Fast	—
Code blue	Blue	Fast	—
Code pink	Pink	Fast	—
Staff emergency (2)	Red	Medium	—
Lavatory emergency	Red	Medium	—
Urgent	Red	Medium	—
Auxiliary emergency (8)	Amber	Medium	RN reminder (Red) set
Patient emergency (2)	Amber	Medium	RN reminder (Red) set
Auxiliary priority (5)	Amber	Slow	RN reminder (Red) set
Patient priority (2)	Amber	Slow	RN reminder (Red) set
Bed exit	Amber	Slow	RN reminder (Red) Set
Cord pull (2)	Amber	Slow	RN reminder (Red) set
Patient normal	White	Slow	Cleared
Family	White	Slow	Cleared
Staff normal	White	Slow	Cleared
Housekeeping	White	Slow	Cleared

Nurse call priority type [1]	Staff console row/cell color	Tone repeat rate	Connect response
Reminder 1 [RN]	Red	—	—
Reminder 2 [LPN]	Amber	—	—
Reminder 3 [Aide]	Green	—	—

[1] If more than one instance of a nurse call type is possible, the number of instances appears in parentheses, e.g., Auxiliary Emergency (8) means that there can be up to eight types of auxiliary emergency nurse calls.

Chapter 3
Using staff consoles and annunciators

Summary

This chapter provides instructions for using staff consoles and annunciators to handle calls and reminders, and to configure call priorities for specific rooms or beds. Also included here are instructions for calibrating the touch screen and cleaning the plastic housing and touch screen.

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Notes

- When using a headset, the speakerphone is nonfunctional. To use the speakerphone, unplug the headset.
- To switch to the speakerphone when using a handset, press the Speakerphone button on the Audio screen.

Displaying the screen you need

To change the screen displayed on the staff console or annunciator, touch the corresponding screen selection tab. Screen selection tabs are continuously displayed at the bottom of each screen.

Figure 11: Screen selection tabs

The following table shows which tab to select in order to display the screen you need.

Table 4: Screen selection tabs corresponding to specific tabs

To perform this task	Select this tab
Adjust alert tone volume	Audio tab
Adjust the call volume	Audio tab
Answer a call	Calls tab
Answer a reminder	Reminders tab
Clean the touch screen	Admin tab
Clear a reminder (normal priority)	Reminder tab
Configure call priorities for a room or bed	Room list tab
Hang up or cancel a call	Audio tab
Place a call	Room List tab
Recalibrate the touch screen	Admin tab
Set a reminder	Audio tab
Turn off alert tones	Call tab, Reminders tab, Room List tab
Upgrade a call to a higher priority	Audio tab

Answering calls

Note: The naming convention in use at your facility allows you to distinguish between room calls and bed calls.

In general, room calls typically come from staff members. Bed calls come from patients.

The staff console provides two-way voice communication like that provided by a telephone. You can hear the caller even when you are speaking.

Calls from patient and staff stations

To answer the highest priority call:

1. Select the Calls tab to open the Call screen.
2. Lift the handset.

   — or —

3. If you are using the speakerphone or a headset, press Connect.

To answer a lower priority call:

1. Open the Call screen.
2. From the list, select the call to be answered.
3. Lift the handset.

   — or —

   If you are using a headset or the speakerphone, press Connect.

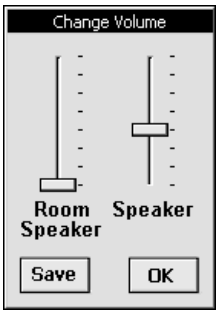
Calls from other staff consoles and annunciators

You can call and receive calls from other staff consoles and annunciators. Although the Call screen does not display these calls, the Audio tab flashes and displays the staff console or annunciator ID when the call comes in. On the Audio screen, the Connect button is replaced with an Answer button.

To answer a call from an annunciator or staff console:

Lift the handset or press Answer.

Adjusting the volume of voice communications and alert tones



Adjusting the volume on your staff console or annunciator

You can control the call volume for the speakerphone, handset, headset, and the alert tone for your staff console or annunciator. This is a local setting, and does not affect the volume of other staff consoles or annunciators. Note that alert tones cannot be turned off.

In addition, you can use the staff console to set the volume of calls on any staff or patient station to which you are connected. These settings will apply to calls received from any staff console or annunciator in the nursing unit.

To adjust the call volume of the speakerphone, handset, or headset:

1. While connected to a call, press the Volume button. The Change Volume dialog box appears.
2. Slide the Speaker button up or down to increase or decrease the volume..
3. Press Save. The new settings will remain in effect until they are changed again.

To adjust the alert tone volume of a staff console or annunciator:

1. Click the Audio tab, then press the Volume button. This opens the Volume dialog box.
2. Slide the Tones button up or down to increase or decrease the volume of alert tones. It is not possible to turn the tones off. The new settings will remain in effect until they are changed again.

Adjusting the call volume on remote patient and staff stations

From your staff console, you can adjust the volume of voice communications on staff or patient stations. This must be done while you are connected to the station. The new volume setting will apply to calls received on the station from any staff console or annunciator until it is changed again, from any staff console or annunciator.

To adjust the call volume of a staff or patient station:

1. While connected to the staff or patient station, press the Volume button (on the Audio screen). The Change Volume dialog box opens.
2. Slide the Room Speaker button up or down to increase or decrease the volume.
3. Press Save. The new volume setting will remain in effect until it is changed again. The volume can be changed from any staff console or annunciator connected to the station.

Temporarily silencing alert tones

You can silence alert tones at your staff console or annunciator for a preset maximum time period. Alert tones are automatically reinstated one the maximum time period has elapsed, or when a new call is received, whichever comes first.

Alert tones are automatically reinstated one the maximum time period has elapsed, or when a new call is received, whichever comes first.

To temporarily silence the alert tone on a staff console or annunciator:

1. Open the Call screen, Reminders screen, or Room List screen.
2. Press the Tone Silence button. This mutes alert tones for the current call at the staff console or annunciator.

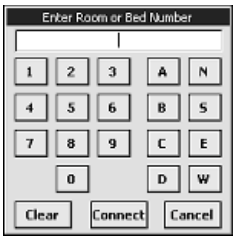
To restore alert tones on a staff console or annunciator:

1. Open the Call screen, Reminders screen, or Room List screen.
2. Press the Restore Tones button. This restores alert tones at the staff console or annunciator. The button label changes to Tone Silence.

Placing calls

To call a patient, dial the bed number. To call a nurse or other staff member who may be in the room, dial the room number. If you know the number, you can simply open the dial pad and enter it.

If you don't know the number, you can place the call by selecting the bed or room from a list.



To dial a known number:

1. Select the Audio tab, then pick up the handset or press the Dial Pad button. This opens the dial pad shown at left.
2. Enter the number.

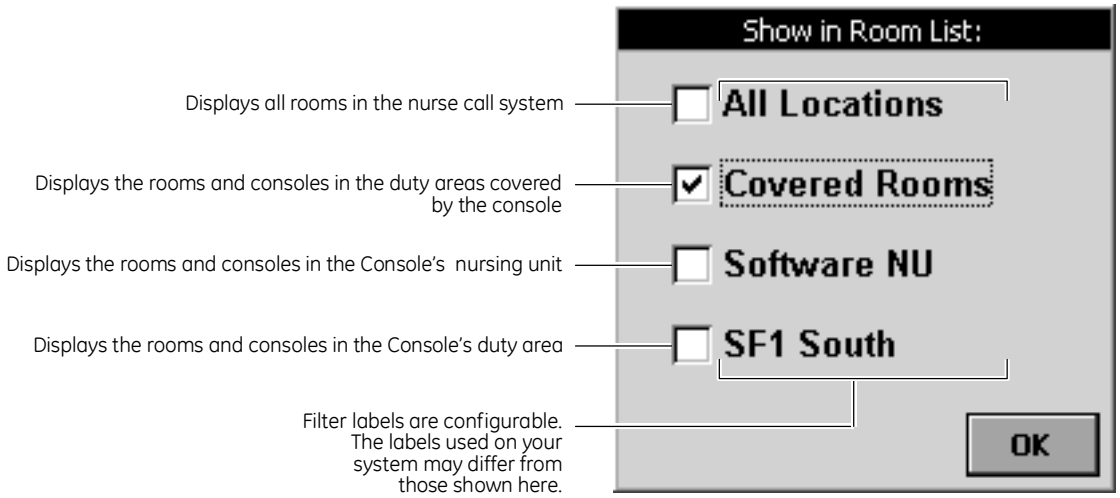
   Note: If you mistype a number or letter, press Clear, then enter it again.
3. Press Connect on the dial pad.

To place a call by selecting the bed or room from a list:

To configure the call priorities for a specific staff or patient station:

1. Select the Room List tab, then click the button labeled Showing. This opens the dialog box shown below.

Figure 12: Room filters dialog box


Show in Room List:
All Locations
Covered Rooms
Software NU
SF1 South
OK
Displays all rooms in the nurse call system
Displays the rooms and consoles in the duty areas covered by the console
Displays the rooms and consoles in the Console's nursing unit
Displays the rooms and consoles in the Console's duty area
Filter labels are configurable. The labels used on your system may differ from those shown here.

2. Indicate which rooms to display in the list by selecting one of the check boxes, then click OK. This closes the dialog box and populates the room list.
3. From the list, select the room or bed that you want to call.
4. Lift the handset.

   — or —

If you are using the speakerphone or a headset, press Connect.

To hang up at the end of a call:

Replace the handset.

— or —

If you are using the speakerphone or a headset, press the Hang Up button on the Audio screen.

To cancel a call before establishing a connection:

Press Cancel on the dial pad.

Clearing calls from the system

Normal priority calls

Normal priority calls are cleared from the system when you connect to the call (unless you upgrade the call or set a reminder) or when staff presence is registered in the room where the call originated. Normal priority calls include the following:

- Patient normal
- Family
- Staff normal
- Housekeeping

To clear a normal priority call:

1. Lift the handset or press Connect to answer the call.
2. Replace the handset.

   — or —

3. Press the Hang Up button on the Audio screen.

Higher priority calls

By default, all calls except normal priority calls must be cancelled from the point of origin. A staff member must go to the staff or patient station where the call was placed and push the Cancel button. This clears the call from the nurse call system. The call no longer appears on staff consoles or annunciators, and corridor and zone lights extinguish.

Note: If two or more stations are *associated* and their Cancel buttons are *linked*, pressing the Cancel button on any station in the room cancels calls made from the room. See "Associated stations and linked buttons" on page 53, for more information).

Upgrading calls to higher priorities

You can upgrade a call to a higher priority while connected to the room or bed. When you upgrade a call, a new call appears in addition to the original, which also remains on the screen. Depending on how the system is configured, dome lights associated with the patient station may begin to flash or to flash faster.

Follow these steps to upgrade the priority of a nurse call:

To upgrade a call to a higher priority

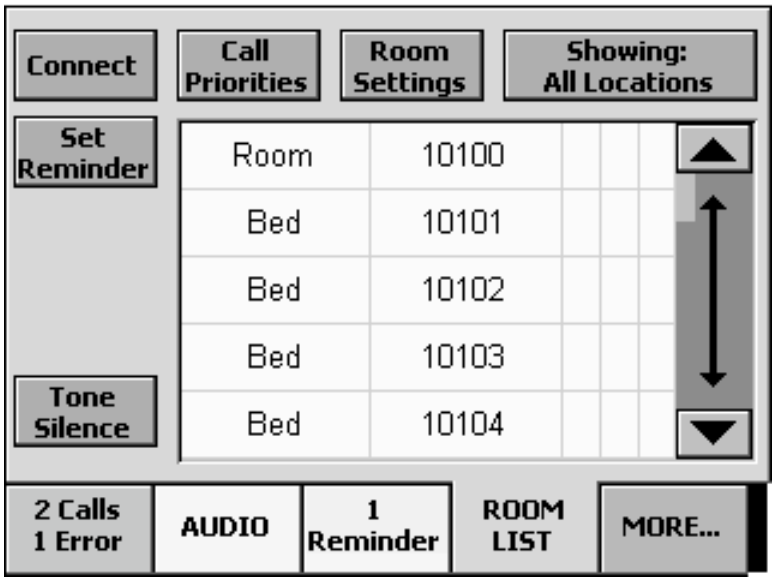
1. On the Audio screen, press the Upgrade button. This opens an Upgrade dialog box. Only higher prio
2. Select the call priority to be applied.
3. Press OK.

Note: Calls initiated from your staff console cannot be upgraded until they appear on either the Calls tab or the Remind tab.

Configuring call priorities for a staff or patient station

By default, call devices such as pillow speakers share the same call priority as the patient station to which they are connected. The procedure that follows shows how to assign different call priorities to different devices.

Figure 13: Room List

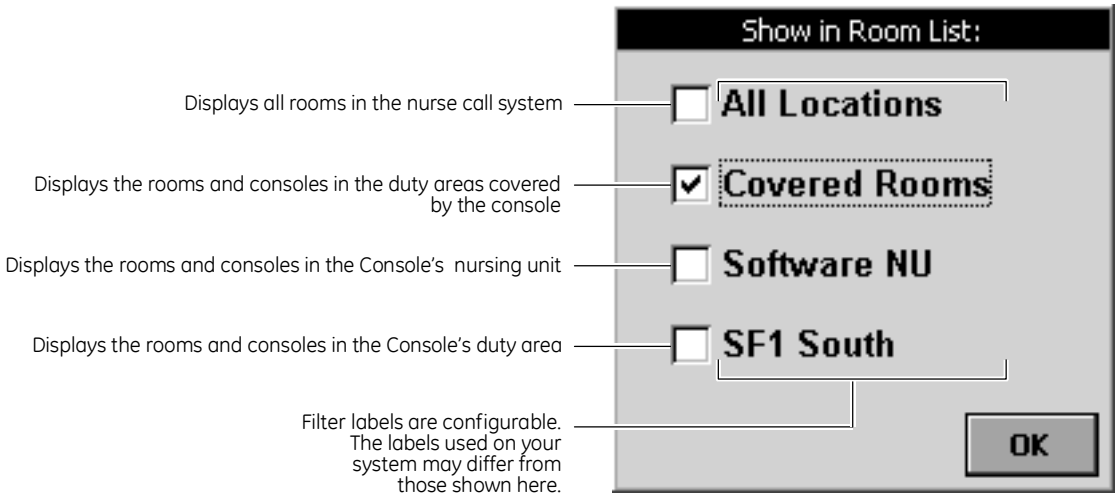


Note: Call priority labels are configurable. The labels shown on your system may differ from those shown here.

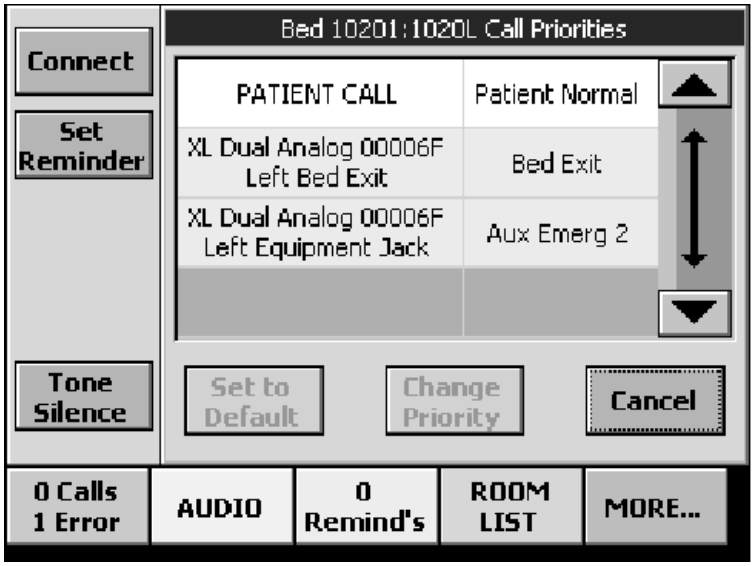
To configure the call priorities assigned to a room:

1. Select the Room List tab, then click the button labeled Showing. This opens the dialog box shown below, which lists four room list filters.

Figure 14: Room filters dialog box


Show in Room List:
All Locations
Covered Rooms
Software NU
SF1 South
OK
Displays all rooms in the nurse call system
Displays the rooms and consoles in the duty areas covered by the console
Displays the rooms and consoles in the Console's nursing unit
Displays the rooms and consoles in the Console's duty area
Filter labels are configurable. The labels used on your system may differ from those shown here.

2. Select the filter to be displayed, then click OK. This closes the dialog box and populates the room list.
3. Select the room or bed that you want to configure, then click Call Priorities. The system retrieves the call devices connected to the staff or patient station being configured.



4. Select the device to be configured, then click Change Priority.
5. Select the call priority to be assigned to the device, then click OK.

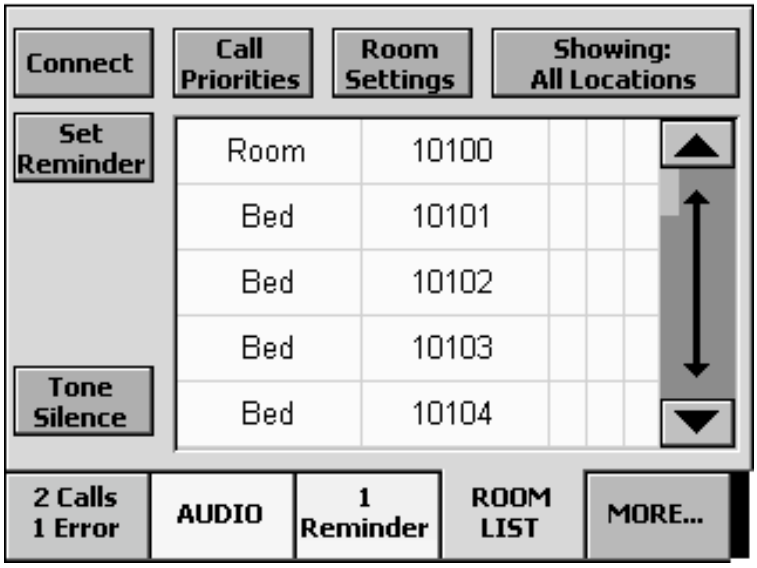
To revert to the default priorities for a specific staff or patient station:

1. Select the Room List tab, then select the room to be changed.
2. Press the Call Priorities button. The staff console retrieves the current call priorities for the room.
3. Select the call to be changed, then press Set to Default.

Canceling normal priority calls from telephones or wireless devices

By default the Telligence system cancels normal priority calls only upon audio connection from a Telligence device. If a regular or wireless phone is used to call a room or bed, an audio connection will be established, but no calls affected by the connection. If you want to allow regular or wireless phones to affect calls, it can be enabled using the Telligence Configuration Tool. Doing so, however, will void the UL listing.

Figure 15: Room Settings dialog box



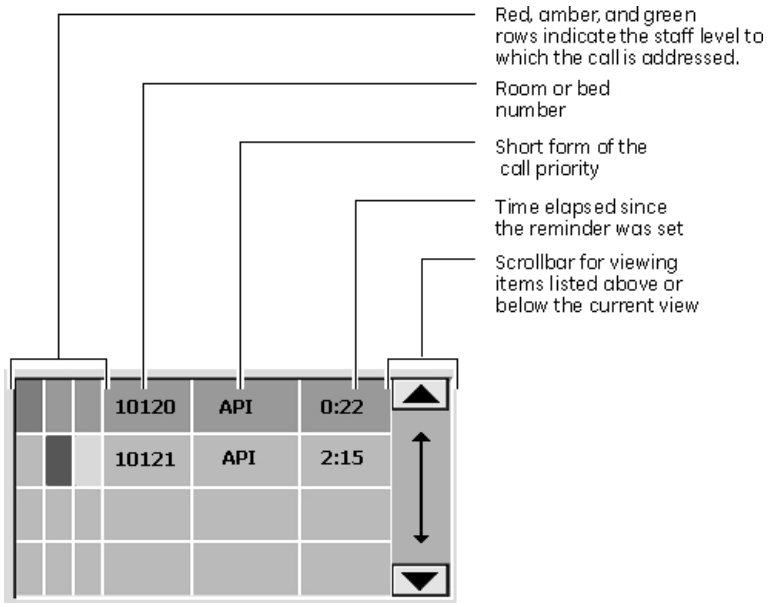
Caution: The Telligence System's UL Listing may be voided if normal priority calls are canceled when staff members answer them using telephones. Normal priority calls should be canceled only at staff consoles or annunciators, or at the patient room.

Working with reminders

What are reminders?

When you receive a call that can't be addressed immediately, you can set a call reminder, with or without answering the call. Setting a reminder moves the call from the Call screen to the Reminders screen, and sets a timer. If the timer elapses before the call is cleared, the nurse call is regenerated. When the timer elapses, you can place the call on reminder again, if necessary, which starts the cycle over.

Figure 16: Reminder list


Red, amber, and green rows indicate the staff level to which the call is addressed.
Room or bed number
Short form of the call priority
Time elapsed since the reminder was set
Scrollbar for viewing items listed above or below the current view
10120
API
0:22
10121
API
2:15

Calls can continue to cycle between the Reminder screen and the Call screen until they are cleared.

Normal priority calls can be cleared from a staff console or annunciator. Once a normal priority call has a reminder set on it, however, it cannot be cleared by an audio connection.

Note: Calls placed on reminder are displayed on both the Call screen and the Reminders screen on an emergency annunciator.

How quickly a reminder is recalled to the Call screen depends on its call priority. By default, normal priority calls are recalled to the Call screen after 3 minutes, and higher priority calls are recalled after 1 minute. These times are configurable, though. For instructions on changing reminder recall times, see the installation manual provided with your Telligence system *3101010 R1.0 Telligence Patient-Staff Communications System Installation Manual*.

Visual cues

Setting a call reminder triggers visual cues, as well:

- The Remind tab on staff consoles and annunciators flashes until you view the Reminder screen.
- The number of active reminders is shown on the Reminders tab.
- Corridor lights and zone lights slowly flash in the color associated with the highest staff level priority reminder until the call has been canceled.

  When nonemergency calls are received, both the active call and the active reminder are shown. When any of the top four call priorities is received, however, no reminders are shown. Only the emergency call is represented.

You can place calls on reminder without answering the calls, assigning them up to three staff levels (RN, LPN, and aide). Only one reminder is created and only one recall (to the Call screen) occurs for a call on reminder (each time it returns from the Reminders screen), even if all three staff level priorities have been set.

By default, nurse calls with priorities higher than normal but lower than urgent are automatically placed on reminder, with red (RN) staff level priorities, at the time that staff members answer the calls.

Setting call reminders

To remind yourself of something that needs to be done in a particular room, you can select the room and set a location reminder. This lists the reminder on the Reminders screen, and starts a timer. When the timer expires, the reminder is displayed on the Call screen. The dome light for the room flashes. The default priority for a room location reminder is staff normal.

Manually setting reminders

For nurse calls on the Call, Audio, and Room List screens, staff members use the Set Reminder window not only to place calls in the reminder list, but also to assign staff level priorities to the calls. When calls are manually set on reminder, or when additional staff level priorities need to be placed on nurse call reminders already in the Remind list, staff members use the Set Reminder window to assign them one or more of these staff level priorities:

- Red: The highest staff level priority, RN.
- Amber: The middle staff level priority, LPN.
- Green: The lowest staff level priority, aide.

Setting a reminder from the Call screen

To manually set a reminder from the Call screen:

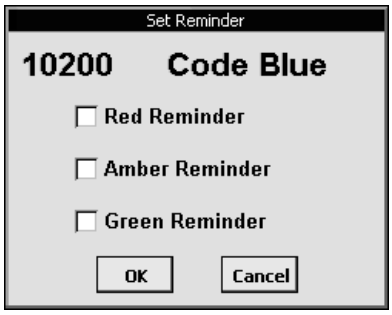
1. Answer a call and press the Set Reminder button.

   — or —

   Select the Calls tab, touch a nurse call row, and press the Set Reminder button.

Note: Use the latter method to place a call on reminder without answering the call.

Figure 17: Set Reminder window



2. On the Set Reminder window that appears, touch one or more staff level priority checkboxes (red for RN, amber for LPN, and/or green for aide) to assign one or more staff level priorities to the reminder, then press OK.

The call is moved from the Call screen to the Remind screen.

Note: On emergency-mode annunciators, calls placed on reminder are displayed on the both the Call and the Remind screen.

Setting a reminder from the Audio screen

To set a reminder from the Audio screen:

1. While conducting a call on the Audio screen, press the Set Reminder button.
2. Touch one or more staff level priority checkboxes (red for RN, amber for LPN, and/or green for aide) to assign one or more staff level priorities to the reminder, and press OK.

A reminder row representing the call appears on the Remind screen. The row is located, according to its call priority and the elapsed time since the call was received, at the appropriate place in the reminder list.

Note: Staff members cannot place reminders on calls to or from staff consoles or annunciators.

Setting a reminder from the Room List screen

1. Touch the Room List tab, and touch a room or bed row.
2. Press the Set Reminder button.
3. Touch one or more staff level priority checkboxes (red for RN, amber for LPN, and/or green for aide) to assign staff level priorities to the reminder, and press OK. On the Remind screen, a reminder row appears, according to the call priority and time of reminder creation, at the appropriate place in the reminder list.

Note: The priority for a bed reminder is keyed to the patient station's priority. The priority type for a patient room reminder is staff normal.

Setting reminders automatically

Answering certain priority calls incoming on the Call screen — by default, calls with priority types below urgent and higher than normal priority — automatically sets reminders for the calls on the Reminders screen. The staff level priority for automatically created reminders is the RN-level priority; a cell on the left of the reminder row illuminates in red for call reminders that are automatically set. The table on page 19 gives additional information about reminders.

Adding staff levels to reminders

To add a staff level priority to a reminder already on the Reminders screen:

1. Select the Remind tab, then touch the call reminder in the reminder list.
2. Press the Set Reminder button.
3. In the Set Reminder dialog box, touch one or more staff level priority checkboxes (red for RN, amber for LPN, and/or green for aide) to assign additional staff level priorities, and press OK.
    - The color indicating the staff level that you selected appears on the left side of the reminder row.
    - The color of the highest staff level priority appears in the bottom sections of dome lights associated with the station where the call originated.

Note: If needed, you can select all three staff level priorities for a reminder.

Answering call reminders from the reminder list

You can answer call reminders from the reminder list, as follows.

1. Select the Remind tab, and press the Connect button to answer the first call listed, which is the call reminder with the highest priority in the reminder list.

   — or —

2. Select the Remind tab, touch the reminder row, and press the Connect button to connect to the selected room or bed.

Clearing reminders

Reminders that have been set for normal priority calls can be cleared from a staff console or annunciator by pressing the Clear Reminder button on the Reminders screen.

Reminders for other call priorities can only be canceled by pushing the Cancel button on the patient station where the call originated. This clears the reminder from the nurse call system, so that it no longer appears on staff consoles or annunciators, and Corridor lights and zones lights stop flashing.

To clear a reminder on the staff console or annunciator:

1. Select the Remind tab.
2. Select the normal priority reminder row, and press the Clear Reminder button.

Clear reminders only if you are certain the caller is no longer on the line, and that a staff member has handled the original request.

Note: This does not cancel the call, but only clears the reminder.

Calibrating staff consoles and annunciators

Calibrating on initial startup

When a staff console or annunciator is first plugged in, a calibration screen appears.

1. Press first one circle on the touch screen, and then a second circle, to ensure that when you touch an object on one of the Telligence screens, it is the object you want to touch.

Recalibrating to correct problems with the touch screen

With use, the image on the touch screen may drift slightly, making it difficult to select items accurately. Recalibrating corrects this problem.

Caution: Recalibrating the primary staff console or an annunciator being used as a staff console will temporarily remove the device from the system. This will appear to the system as a staff console failure, which will activate the HC-CL4-SUPV Supervision Module with Buzzer. Make sure the hospital staff is aware and prepared for this loud audible signal.

To recalibrate the touch screen:

1. Select the More tab to open the Admin screen.
2. Select Calibration. A message box appears, warning that continuing will trigger a trouble response at the supervisory dome light.
3. Press OK. This resets the console and starts the calibration sequence.
4. Follow the onscreen prompts to recalibrate the touch screen.

Cleaning staff consoles and annunciators

Cleaning mode temporarily deactivates the touch screen, so you can clean the staff console or annunciator without activating the onscreen buttons.

1. On the staff console or annunciator, select the More tab.
2. On the Admin screen, press Clean, then press OK. The staff console or annunciator enters a 15-second cleaning mode period.

Note: By default, the unit remains in cleaning mode for 15 seconds, but this setting can be changed. For instructions on changing the duration, see the installation manual provided with your Telligence system *3101010 R1.0 Telligence Patient-Staff Communications System Installation Manual*

Cleaning the screen

The touch screen can be harmed by the fibers in regular cloth, which make microscopic scratches that can add up over time, so we highly recommend the following:

1. Slightly moisten a soft cloth (preferably, a lint-free eyeglass-cleaning cloth, or at least a microfiber cloth) with a diluted window-cleaning solution.
2. Follow the above steps to place the staff console or annunciator into cleaning mode.
3. Use the cloth to gently clean the surface of the touch screen.
4. Use a dry, soft cloth of the same type (a lint-free eyeglass-cleaning cloth, or a microfiber cloth) to gently dry the surface of the touch screen.

Notes

- *Do not* use a paper towel, tissue, or camera lens paper, all of which are too abrasive, to clean the touch screen.
- *Do not* spray the touch screen with any liquid; the staff console or annunciator's electronics can be damaged if drops of moisture seep into the housing.

Cleaning the housing

1. Slightly moisten a soft cloth with the disinfectant typically used by your facility's maintenance staff (e.g., Sidex, Staphine, or a 10% bleach/water solution).
2. Follow the steps listed at the start of this section to place the staff console or annunciator into cleaning mode.

3. Use the cloth to gently clean the surface of the staff console or annunciator's housing, being careful not to touch the touch screen.
4. In the case of the staff console, also use the moist cloth to gently clean the handset, the handset cord, and the headset and headset cord, if a headset is in use.
5. Use another soft, dry cloth to dry the surface of the housing.

Note: Do not soak the staff console, the annunciator, or any attached cords.

Maintenance notes

- Clean your hands before touching the touch screen.
- Avoid scratching the touch screen.
- Never use a pen, pencil, or other sharp object on the touch screen.
- Avoid striking the touch screen with hard or sharp objects.
- Place cups, glasses, and drinking containers away from the staff console or annunciator to avoid accidental exposure to spilled liquids.
- Do not eat or drink near the staff console or annunciator.
- Take care not to drop the staff console or annunciator or to subject it to strong impact.
- Do not use force when setting the staff console or annunciator down.
- Do not place the staff console or annunciator on or near heat sources such as radiators.
- Make sure the staff console connecting cable is routed through the strain relief openings in the base.

Ergonomic recommendations

- Reduce or eliminate repetitive movement.
- Perform tasks at appropriate heights.
- Maintain a natural posture, avoiding awkward positions.
- Provide adequate clearance for staff console and annunciator use.
- Place the staff console in a position that lets you view and touch the display without strain.
- Place the staff console in a position where the sun's rays or artificial lights do not adversely reflect on the touch screen, causing eyestrain.
- If you have trouble selecting items on the screen, select the More tab, then use the Admin function to recalibrate the touch screen.

Resolving staff console and annunciator problems

Resolutions to some problems that may occur at staff consoles or annunciators are provided here.

Errors at staff consoles and annunciators

If a staff console or an annunciator experiences an error, an alert will be signaled by messages appearing at other staff consoles or annunciators, and/or by the flashing and toning of the dome light supervising the staff console or annunciator.

A four-section HC-CL4-SUPV supervisory dome light fast flashes white in all four of its light sections, and sounds tones at the rate it is flashing, to signal loss of power and data to the supervised staff console or annunciator. When the status of a supervised device becomes normal, all four dome light sections extinguish and dome light tones cease.

To resolve a staff console or annunciator error:

1. Disconnect power to the staff console or annunciator, then plug it in again.

If removing power from, followed by restoring power to, the staff console or annunciator does not resolve the problem, contact the GE Security Technical Services Department at 1-800-385-2639 during normal business hours.

Chapter 4
Patient stations

Summary

Telligence patient stations connect patient rooms and beds to the nurse call system. Patient stations are installed on the headwalls of patient rooms, where they serve both patients and staff. This chapter describes this group of devices and provides instructions for using them.

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Basic functions

Smart patient stations are mounted near beds in patient rooms. They provide receptacles for pillow speakers, call cords, and electronic bed control panels, which allow patients to call the nursing unit from a bed or chair.

Staff members use the patient station call buttons to call the nursing station or to signal a code blue or staff emergency. Patient stations have built-in speakers and microphones for two-way voice communication.

Staff and patient rooms may also be equipped with smart staff/duty stations like the one shown at left. These devices have call buttons that allow staff members to call the nursing station for assistance, or to signal code blue or staff emergencies. Like patient stations, staff/duty stations are audio-equipped, supporting two-way voice communication.

A number of peripheral nonaudio-equipped call stations may also be associated with the patient station. These include code blue stations, staff emergency stations, lavatory stations and others.

Finally, patient stations typically have equipment receptacles for connecting equipment such as IV pumps and respirators to the nurse call system. This allows the system to monitor critical equipment and to send an error message to the nursing station if the equipment enters an alarm condition.

Single and dual patient stations

Single patient stations support one bed, and dual patient stations support two beds. Typical dual and single patient stations are shown in Figure 18 and Figure 19 on page 50.

Figure 18: Single patient station with BedConnect (Model HC-PSTN1-BED)

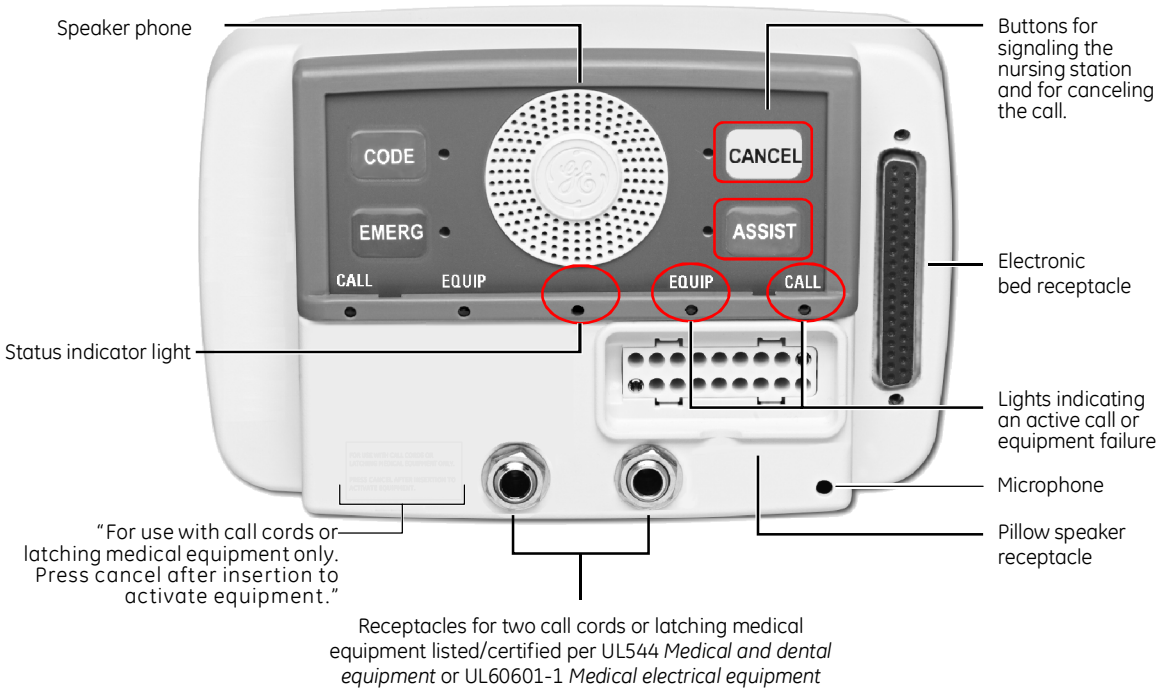
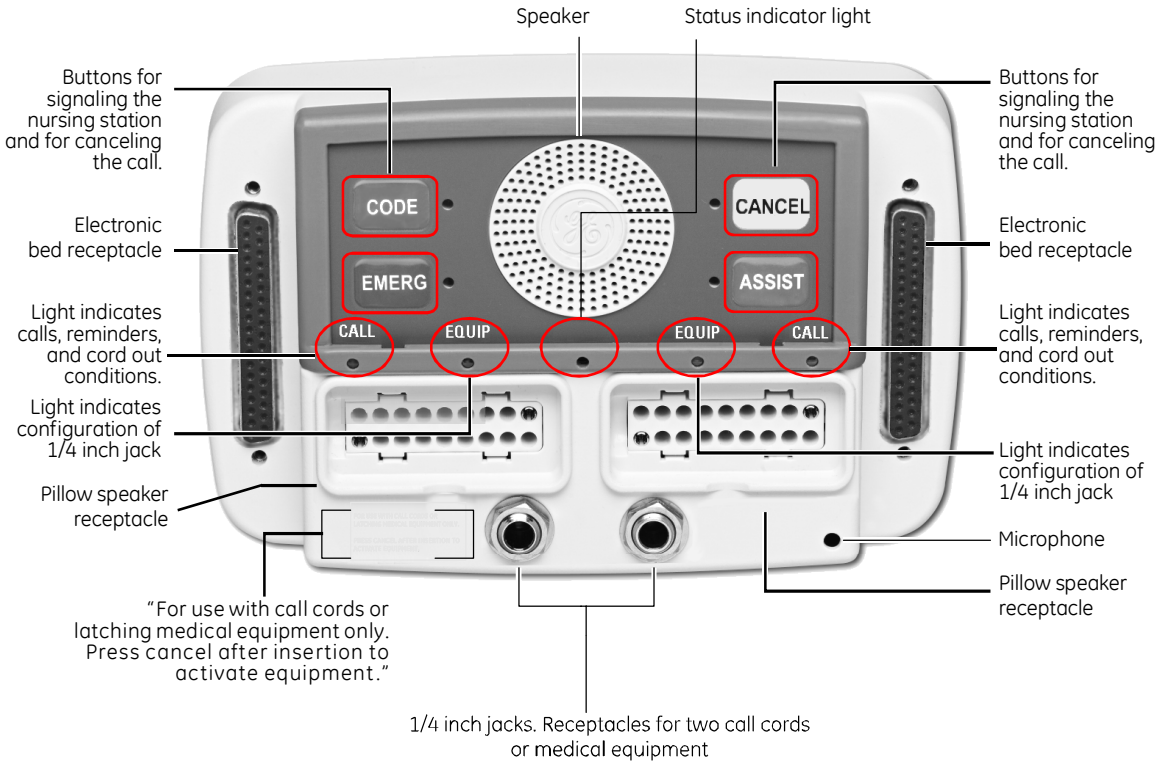

Speaker phone
Buttons for signaling the nursing station and for canceling the call.
CODE
CANCEL
EMERG
ASSIST
CALL
EQUIP
EQUIP
CALL
Electronic bed receptacle
Status indicator light
Lights indicating an active call or equipment failure
Microphone
Pillow speaker receptacle
"For use with call cords or latching medical equipment only. Press cancel after insertion to activate equipment."
Receptacles for two call cords or latching medical equipment listed/certified per UL544 *Medical and dental equipment* or UL60601-1 *Medical electrical equipment*

Figure 19: Dual patient station with electronic bed receptacle (Model HC-PSTN2-BED)


Speaker
Status indicator light
Buttons for signaling the nursing station and for canceling the call.
Buttons for signaling the nursing station and for canceling the call.
CODE
CANCEL
EMERG
ASSIST
CALL
EQUIP
EQUIP
CALL
Electronic bed receptacle
Electronic bed receptacle
Light indicates calls, reminders, and cord out conditions.
Light indicates calls, reminders, and cord out conditions.
Light indicates configuration of 1/4 inch jack
Light indicates configuration of 1/4 inch jack
Pillow speaker receptacle
Microphone
Pillow speaker receptacle
"For use with call cords or latching medical equipment only. Press cancel after insertion to activate equipment."
1/4 inch jacks. Receptacles for two call cords or medical equipment

Single and dual stations allow for one Smart Pillow Speaker per bed, as well as a choice of a nurse call cords per bed or a medical equipment connection (either one can be preconfigured or the choice can be made at the point of use). Lights on patient stations provide feedback to staff members. Single and Dual patient stations also come with either BedConnect (front bed connectors) or rear (internal) bed connectors.

See Figure 18 on page 50, and Figure 19 on page 50, for illustrations of single and dual patient stations with BedConnect.

Note: Dual patient stations provide two 1/4-inch jacks, for connecting call cords or critical medical equipment such as ventilators, defibrillators, or IV pumps, to the nurse call system. This equipment must be listed/certified per UL 544 Medical and dental equipment or UL0601-1 Medical electrical equipment.

WARNING: Medical equipment connected to the patient station is not considered to be part of the system configuration unless the equipment in question complies with UL1069 *Hospital signaling and nurse call equipment*.

Caution: Connect the patient station to class 2 circuits only. Make periodic leakage current measurements of all pendant control/pillow speaker circuits to verify that values are appropriate for the installation location.

Figure 20: Standard button templates for patient stations

Patient stations are available with the standard button templates shown above.

Associated stations and linked buttons

Associated stations

All stations in a given patient room are typically associated with each other. This means that calls from any device in the room are identified at the staff console and annunciator by the same room number.

For instructions on linking buttons, see the installation manual provided with your Telligence system. ("Telligence Patient-Staff Communication System Installation Manual," part number 3101010).

By default, the patient station, bed call buttons, smart pillow speakers, call cords/connected medical equipment, and the corridor lights for a patient room are associated. Lavatory stations can also be associated with patient or Smart Staff/Duty Stations, making it possible for lavatory emergency calls to sound at the associated auditory stations.

Linked buttons

When stations are associated, it is also possible to link like buttons on all stations in the group. For example, a room contains the following group of associated stations:

- Patient station
- Code blue station
- Staff emergency station
- Remote cancel station

In addition, the Cancel, Code and Emerg buttons are linked. The linked buttons perform as follows:

- Pressing the Code or Emerg button on one of the peripheral stations causes the patient station's Code or Emerg button LED to light, and its Call status light to light.
- Pressing the Code or Emerg button on the patient station causes the respective peripheral station's Code or Emerg button LED to light.
- Pressing the Code or Emerg button on either the patient station or on the respective peripheral station causes a call assurance tone to sound at the patient station.
- Pressing the Cancel button on any linked station cancels a call from any station in the room.

Associating stations in a patient room and linking all like buttons by room or bed makes using the Telligence nurse call system easier and staff members' work more efficient.

Notes

- Only like buttons can be linked — For example, the Emerg button on the patient station *cannot* be linked to the Code button on the code blue station.

- Linked buttons cannot be used to cancel a lavatory emergency call. Lavatory emergencies can be canceled only from the originating lavatory station, or from an associated lavatory station in the same bathroom.

Patient station buttons

Telligence System patient stations may vary from one room to the next. Different sets of buttons can be present on patient stations, depending on patient and staff needs. Standard buttons that may be present on patient stations are: Code, Emerg, Assist, Privacy, and Cancel.

Table 5: Descriptions of typical command station buttons

Button	Description
	Alerts staff about a code blue emergency.
	Alerts staff about an emergency.
	Sends a request for staff assistance.
	Registers your presence in the patient room
	Blocks audio connectons to the patient room
	Clears active calls. Also used to configure equipment inputs, enter cleaning mode, reset the device, block cord out calls from being sent, etc.

Custom button kit

Facilities may need to order the Telligence System custom button kit to rename one or more of the standard buttons shown above. Alternatively, a system installer may install one or more non-standard or custom buttons for functions already defined in the Telligence System. However, if facilities require patient station buttons for functions not defined in the Telligence System, they must request them on a totally custom basis.

Notes

- If your facility uses custom labels for patient station buttons, note the modified button names in the margin.
- Documentation for the use of custom buttons is beyond the scope of this manual; please contact your supervisor for instructions on their use.

Patient station lights

Lights on the front of the station illuminate buttons in dim light.

Other patient station lights indicate different states:

- Each patient station button has an associated status light.
- Call lights show the status of nurse call requests (per bed) from a station.
- Equip lights show the status of equipment connections.
- Status light shows audio connection, staff follow, presence, privacy, or error.

The various illuminations of these lights specifically denote the following:

Individual button lights

A steady red status light indicates that the button was pressed and that the following actions, specific to each button, have taken place:

- For the Code, Emerg, and Assist button lights, a nurse call was placed.• For the Privacy button, privacy mode was put into effect.
- For the Presence button, presence has been established in this room
- The Cancel light slow flashes when a plug is inserted into the auxiliary jack to indicate a 5 second configuration mode
- The Cancel light flashes when the Cancel button is pressed, and held and there are no calls to clear
- A flashing Cancel light indicates that one (or both) of the patient station cords (for the bed connector, Smart Pillow Speaker, or call cord/auxiliary input) is out.

Call status light

A steady red Call status light indicates a nurse call has been placed by:

- A patient using a Smart Pillow Speaker, call cord, or bed button
- A staff member using a patient station button or a button on a peripheral device (such as a staff emergency station) in the patient room
- Connected medical equipment (when an alarm condition occurs)
- A flashing Call status light indicates that one (or both) of the patient station cords (for the bed connector, Smart Pillow Speaker, or call cord/auxiliary input) is out.

Equip status light

- A steady yellow Equip status light indicates a jack is being used by auxiliary equipment (such as a heart monitor, IV stand, etc.), instead of by a call cord.
- The Equip status light slow flashes when a plug is inserted into the auxiliary jack.

Status light

- A steady red Status light indicates that a staff member has registered presence.
- A flashing red Status light indicates a staff follow call.
- A fast flashing red Status light indicates an alarm condition.
- A steady green Status light indicates an ongoing audio connection.
- A slow flashing green Status light indicates the patient station is in privacy mode.

The status light indicates a number of conditions in the following order of priority:

1. Error state
2. Staff follow
3. Privacy mode
4. Ongoing audio connection
5. Registered presence is indicated.

Patient station tone alerts

Patient stations, like all Telligence System devices that emit sound, sound the same note but vary the tone's pattern — from a rapidly repeating note, through a slow repetition of the note, to a continuous note sound — to signal different call priorities and other factors in the nurse call system. Patient station tones only last for a short time.

- Pre-alert: The patient station beeps once when an audio condition is established.
- Call assurance: The call assurance tone sounds at the patient station to indicate that a call was generated.
- Lavatory: When an emergency call has been made from a lavatory, the patient station associated with it starts to beep slowly and continuously upon presence being registered in the patient room.
- Staff follow: When a staff member registers presence in a patient room, staff follow tones sound at the patient station.

Notes

- Staff follow tones sound for only 2 seconds at patient stations.

- The specific staff follow tone pattern that sounds is for the highest priority nurse call in the duty area or primary staff console at present — with one exception: an in-room lavatory emergency tone has priority over any other nurse tone.
- The patient station also emits one or more feedback tones when its Cancel button is held down for two or more seconds. However, this occurs only if no calls are active on the station.

Using patient stations

You can use the Telligence patient station itself to directly place nurse calls. Patients use controls on smart pillow speakers, call cords, or bed side-rails that are connected to the patient station to place nurse calls. This section covers staff use of the Telligence patient station, and summarizes how patients place nurse calls. For more discussion about patient nurse call placement, see later sections in this chapter.

- Placing a call from the patient station
- Nurse calls of a variety of priorities can be made from the Telligence patient station.

The following section describes how the system responds when a call is placed by pushing a call station command button.

Code blue call

Note: When multiple calls are placed, the system always responds to the highest priority call. These sections describe the system response when no other call is active.

- Code lights on the patient station and on any linked stations
- Call status lights on single and dual patient stations
- Call assurance feedback tone at the patient station
- All light sections of associated corridor and zone lights fast flash blue.
- Associated zone lights emit a fast, repeating buzz.
- Code blue tones sound at staff consoles, annunciators, and duty stations where the staff follow function is active.
- The call appears on the Call screen on staff consoles and annunciators.

Staff emergency call

- Emerg lights on the patient station and on any linked stations
- Call status lights on single and dual patient stations
- Call assurance feedback tone at the patient station
- Top light sections of associated corridor and zone lights fast flash red.
- Associated zone lights emit a fast, repeating buzz.
- Staff emergency tones sound at staff consoles and annunciators, and at stations where the staff follow function is active.
- The call appears on the Call screen on staff consoles and annunciators.

Staff normal calls

- Assist light on the patient station
- Call status lights on single and dual patient stations
- Call assurance feedback tone at the patient station
- Light sections in associated corridor and zone lights show a steady white light.
- Associated zone lights emit a very slow, repeating buzz.
- Staff normal tones sound at staff consoles and annunciators, and at stations where the staff follow function is active.
- The call appears on the Call screen on staff consoles and annunciators.

Patient calls

Patients place nurse calls via the patient station by:

- Pressing the nurse call button on a Smart Pillow Speaker
- Pressing a pushbutton or squeeze pad actuator on a call cord
- Pressing the nurse call button on an electronic bed side-rail control panel

Canceling a call from the patient station

- Press the Cancel button on the patient station to cancel any nurse call placed from the patient station.

  — or —

- Press any linked Cancel button to cancel calls from the patient station.
- Pressing Cancel on or for the patient station causes the following to happen:
- Dome lights and patient room lights extinguish.
- Tones sounding at staff consoles/annunciators and staff follow-activated stations cease.
- The Call screen nurse call row and any corresponding Reminders screen reminder row on staff consoles and annunciators disappear.
- Pressing Cancel cancels all calls in the room but lavatory calls.

Notes

- Normal priority calls are canceled when answered at a staff console or annunciator.

- Pressing Cancel for 8 seconds (and 4 feedback tones) on a patient station or associated room station clears all calls made from the room or bed, and all reminders for those calls. Pressing Cancel for 8 seconds (and 4 feedback tones) also resets all stations in the room.

Placing the patient station in privacy mode

Privacy mode blocks audio connections. Placing a call *from* the patient station, overrides privacy mode.

To turn privacy mode on or off:

1. Click the Privacy button on the patient station.

   The Status light slowly flashes green and the Privacy light turns on, indicating privacy mode is in effect.

   Until privacy mode is canceled, or a higher priority event that uses the status light occurs, the status light will continue to slowly flash green.

2. Click the Privacy button again to cancel privacy mode.

Placing the patient station in staff follow mode

Staff follow modes at the patient station

During system installation, patient stations can be configured with different staff follow modes. Possible staff follow modes for a patient station are:

- No staff follow made, no calls annunciated.
- Duty area mode: The patient station annunciates calls originated in its duty area.
- Console mode: The patient station annunciates calls originated in its assigned staff console's coverage area, which may consist of multiple duty areas, or possibly one or more nursing units.

When a patient station is configured for duty area mode or console mode, it enters this mode and briefly annunciates the highest priority call originated in the corresponding coverage are at the time that a staff member registers presence in the room. New nurse calls may be briefly annunciated until presence is no longer registered.

For information on configuring the system's staff follow mode, see the installation manual provided with your Telligence system *3101010 R1.0 Telligence Patient-Staff Communications System Installation Manual*

To place a patient station in staff follow mode:

1. Press the presence station button corresponding to your staff level:
   - If you are a registered nurse, press the red button.
   - If you are an LPN, press the amber button.
   - If you are a nurse's aide, press the green button.

   The Presence status light turns on.

What happens at the patient station in staff follow mode

Registering presence in the patient room causes patient stations in the room with active staff follow modes to do the following:

- The patient station enters its assigned staff follow mode.
- If one or more calls are active in the coverage area, the Status light starts flashing red.
- If one or more calls are active, the station sounds, for 2 seconds, a tone at the staff follow rate of the highest priority call.

If new nurse calls are originated in the patient station's coverage area, a staff follow tone for the highest existing priority sounds at the patient station.

Canceling staff follow mode at the patient station

Do the following to cancel staff follow mode at a patient station:

Press the presence station button for your staff level again.

- The presence station light and the Status light on the patient station extinguish.
- Staff follow tones for new nurse calls do not sound at the patient station.

Note: For more on staff follow, see the topic "Staff follow function" on page 102.

Using patient call devices

Patients place nurse call requests by pressing buttons located on smart pillow speakers, electronic bed control panels, or call cords (certain call cords have squeeze pad actuators instead of buttons). All of these buttons and actuators are physically connected to the patient station in the patient room. Patients can hear responses *from* staff members in their smart pillow speakers, but *all* other nurse call communications, including all patient communications *to* staff and staff member responses to calls placed by call cord or electronic bed nurse call button, use the speakerphone on the patient station.

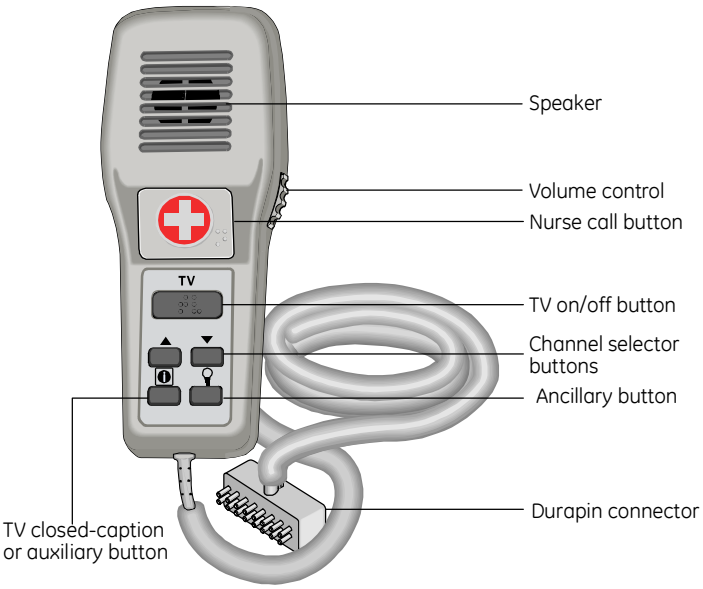
The sections that follow describe Telligence System smart pillow speakers and call cords, and patient communications using smart pillow speakers, call cords and electronic bed panels.

Pillow speakers

Connector

The smart pillow speaker's DuraPin connector plugs into a receptacle on the patient station front panel. The speaker provides audio for nurse call responses to patient calls as well as audio from entertainment sources. (The microphone on the patient station picks up patient communications to the nurses' station.)

Figure 21: Standard Smart Pillow Speaker with DuraPin (Model 7A2016 shown)



Smart pillow speaker controls

Smart pillow speaker buttons and capabilities differ depending upon the model, but all smart pillow speakers place nurse calls in a similar manner. This section introduces smart pillow speaker functionality, using the smart pillow speaker in Figure 1 above as an example.

- TV volume control

  The large thumb wheel on the side of the smart pillow speaker adjusts entertainment audio volume only. It does not control nurse call intercom volume. The volume of audio communications from the nurse and/or from the patient can be adjusted only at the staff console or annunciator.

  Turn the thumb wheel counter-clockwise to increase entertainment audio volume. Turn it clockwise to decrease entertainment audio volume.

- Nurse call button

  Press this button to place a call to the nurses' station staff console. The nurse call button is backlit for use in darkened rooms. See "Placing a call from a smart pillow speaker" on page 65 for more about placing nurse calls from smart pillow speakers.

- TV on/off button

  Press this button to control television functions. Depending on system configuration, it turns the TV on/off and steps through the channels, or it only turns the TV on/off. In the latter case, press the up/down arrow buttons to change channels.

- TV channel up/down arrow buttons

  Depending on your system configuration, pressing these buttons may change television channels or control lights; or, they may have other assigned functions.

- Closed-captioning button or auxiliary button

  A feature of some smart pillow speakers, the **"i"** button is an internationally recognized button that turns the TV closed-captioning function on and off. On other smart pillow speakers, this button is labeled "CC" for Closed Captioning. If a button is not labeled on a Smart Pillow Speaker, it is not functional.

  Note: Closed captioning translates TV audio into visual text, and often provides more information than just the audio translation. It allows the hearing-impaired, and those in a noisy environment, to understand what is happening on their TV sets.

- Ancillary button

  For the standard Telligence Smart Pillow Speaker, this button is labeled with a light bulb, indicating that it controls one or two low voltage lights in the room. If a button is not labeled on a Smart Pillow Speaker, it is not functional.

Types of smart pillow speakers

Telligence smart pillow speakers facilitate patient communications with the nurses' station staff console. After plugging a Telligence Smart Pillow Speaker's DuraPin connector into the front of a patient station, you can clip the Smart Pillow Speaker to the patient's bed sheet for easy access. When not in use, a Smart Pillow Speaker can be stored in a Smart Pillow Speaker holder.

GE Security offers the following choices for smart pillow speakers: a standard (analog) Smart Pillow Speaker, four (digital) smart pillow speakers, and four direct-access, (digital) smart pillow speakers. These models are described in the sections that follow.

Standard Smart Pillow Speaker Model 7A2016

The standard model 7A2016 Smart Pillow Speaker (shown on page 62), used with standard hospital-grade televisions, provides:

- Nurse call capability
- Basic television controls:
    - TV on/off
    - TV channel up/down buttons, for cycling through channels sequentially
    - TV volume control — via the thumb wheel on the Smart Pillow Speaker side
- Lighting control

The standard Smart Pillow Speaker features a large nurse call button, three TV control buttons, a button for lighting control, and a button that may provide another type of control, depending on how your system is set up. Lights are turned on and off using one button as explained in the topic "Light controllers" below.

Light controllers

The Telligence standard (model 7A2016) Smart Pillow Speaker (see Figure 21 on page 62) control either one light fixture or two light fixtures sequentially. If one light fixture is wired to the controller, pressing the light bulb button turns that light on and off. If two light fixtures are wired to the controller, pressing the light bulb button cycles between turning both fixtures on and off. A typical cycle would be light #1 on/light #2 off, light #1 off/light #2 on, light #1 on/light #2 on, and finally light #1 off/light #2 off.

Caring for smart pillow speakers

To ensure proper operation of the Smart Pillow Speaker, follow these precautions:

- Use the provided bed clip to secure the Smart Pillow Speaker to the patient's bedding for easy accessibility.

- Use the provided cord clamp to secure the Smart Pillow Speaker cord to itself. Do not wrap the Smart Pillow Speaker cord around the bed rail to get it out of the way.
- Place the Smart Pillow Speaker in the provided holder when not in use.
- Do not pull on the Smart Pillow Speaker to remove it from the patient station or while moving the bed. Doing so can damage the delicate electronic equipment inside the Smart Pillow Speaker.

Smart pillow speakers can be cleaned with a soft cloth, sprayed or dampened with the disinfectant your facility's maintenance staff typically uses (e.g., Sidex, Staphine, or even a 10% bleach/water solution). *Do not* soak the cords.

Placing a call from a smart pillow speaker

The Smart Pillow Speaker operating instructions in this section are based on the standard Smart Pillow Speaker and default system settings.

To place a call from a pillow speaker:

1. Press the large nurse call button on the Smart Pillow Speaker. The system responds as follows:
    - The green light behind the Smart Pillow Speaker's translucent nurse call button shines more brightly to confirm nurse call placement.
    - The Call status light on the patient station turns on to confirm nurse call placement.
    - The call assurance tone sounds at the patient station.
    - Associated corridor and zone lights turn on as follows:
    - A steady white light for a patient station with a priority of patient normal
    - Slow flashing amber for a patient station with a priority of patient priority
    - Fast flashing amber for a patient station with a priority of patient emergency
    - Tones sound at staff consoles and annunciators, and at stations where staff follow is active.
    - A patient normal, patient priority, or patient emergency call row appears on staff consoles and unit annunciators.
2. The call may be placed on reminder at the staff console, until the staff member can answer it. When a call is placed on reminder, associated dome lights slowly flash in the highest staff level color.

3. When the call is answered at a staff console or annunciator, this happens:
    - The red light behind the nurse call button on the Smart Pillow Speaker turns on, indicating that the patient can speak with the staff member.
    - Smart Pillow Speaker entertainment audio is interrupted during the call's audio.
    - The Status light on the patient station shows a steady green, indicating the audio connection.
    - The Call light on the patient station extinguishes, if the call was cleared.
    - Dome light illumination for the original call, is the call was cleared.
4. During the call, the patient should speak in a normal conversational tone (patient audio is picked up by the microphone in the patient station on the wall).

    Note: If necessary, the staff member can adjust call volume settings from the staff console or annunciator.
5. When the call ends, this happens:
    - The Status light extinguishes.

Using smart pillow speakers to upgrade calls

Upgrading a Smart Pillow Speaker call requires that presence already be registered in the patient room (see "Registering staff presence" on page 99).

To upgrade a Smart Pillow Speaker call:

1. Press the nurse call button on the Smart Pillow Speaker twice in rapid succession. The system responds as follows:
    - The call assurance tone sounds at the patient station.
    - Top light sections of associated corridor and zone lights fast flash red.
    - On 4-section dome lights, the second light sections down show a steady white.
    - Staff consoles and annunciators show two calls — the staff emergency call and the original call.
    - Staff emergency tones sound at staff consoles and annunciators.

Canceling calls from smart pillow speakers

Regular patient normal calls made by patients from smart pillow speakers are canceled when answered at the staff console or annunciator. If a regular Smart Pillow Speaker call was not answered, or if a Smart Pillow Speaker call was upgraded, the call is canceled in the same way that a call placed directly from a patient station is canceled:

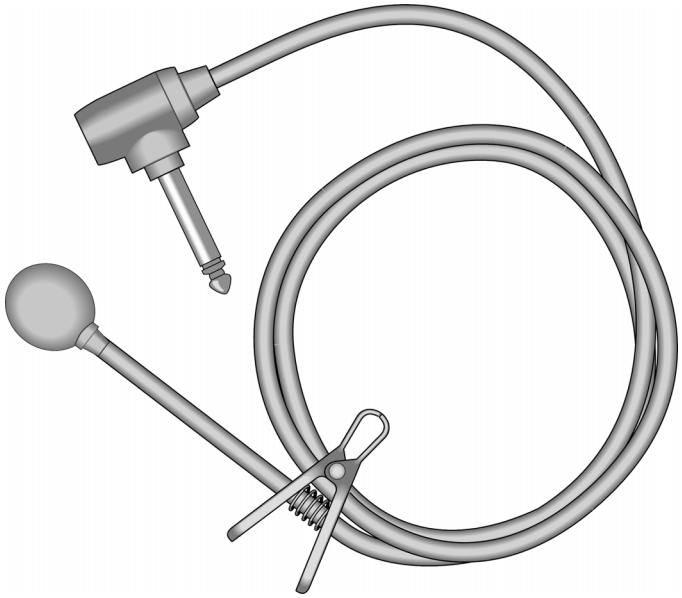
1. Press the Cancel button on the patient station or on any associated station in the patient room. When you press Cancel, this happens:
    - Status and Call lights, along with associated dome lights, extinguish.
    - Tones stop sounding at staff consoles and annunciators.
    - The nurse call row disappears (two nurse call rows disappear if a Smart Pillow Speaker call was upgraded) from staff consoles and annunciators.

Call cords

Call cords provide an alternative means for patients to place calls to the staff console at the nurses' station. The priority of a nurse call placed using a call cord is either patient normal, patient priority, or patient emergency, depending on how the patient station was programmed during system configuration.

Call cords are used with patient stations and with single call cord stations (HC-CCSTN). For patients in oxygen tents, air cord assemblies provide a safe, pressure-activated means — and a convenient method — for patients to place nurse calls. The call cord can be plugged into the patient station or call cord station, then clipped to the patient's bed sheet for easy access.

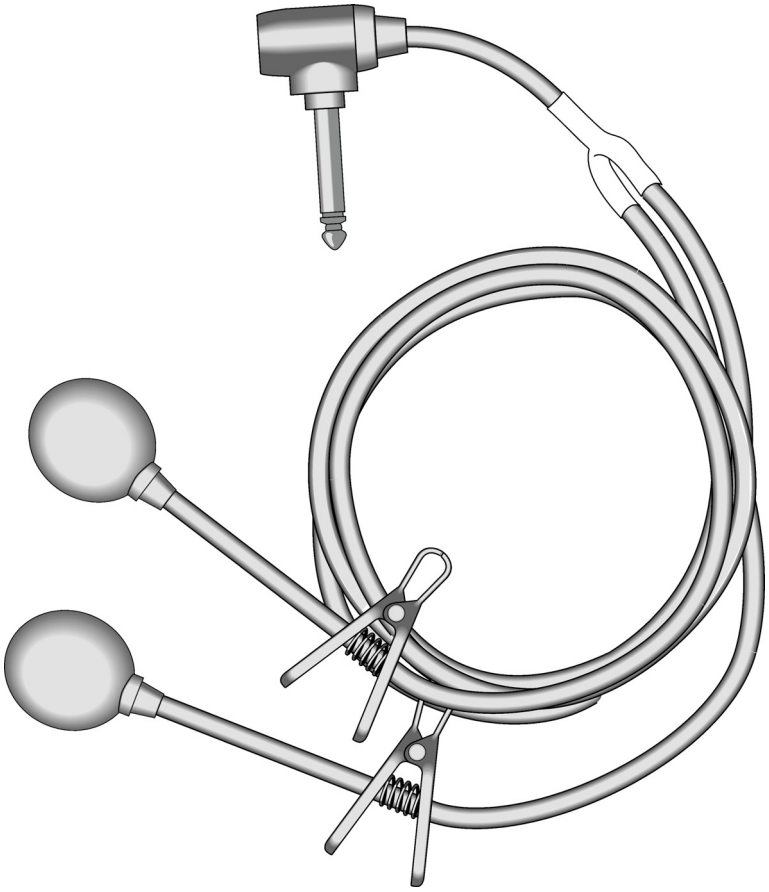
Figure 22: Single air cord assemblies (Models 200-446 and 200-447)



These air cord assemblies provide nurse call capabilities for one patient at a patient station. Equipped with squeeze pad actuators, they are specifically designed for patients undergoing oxygen therapy.

- Model 200-446 is 6 feet (1.8 m) long.
- Model 200-447 is 10 feet (3.0 m) long.

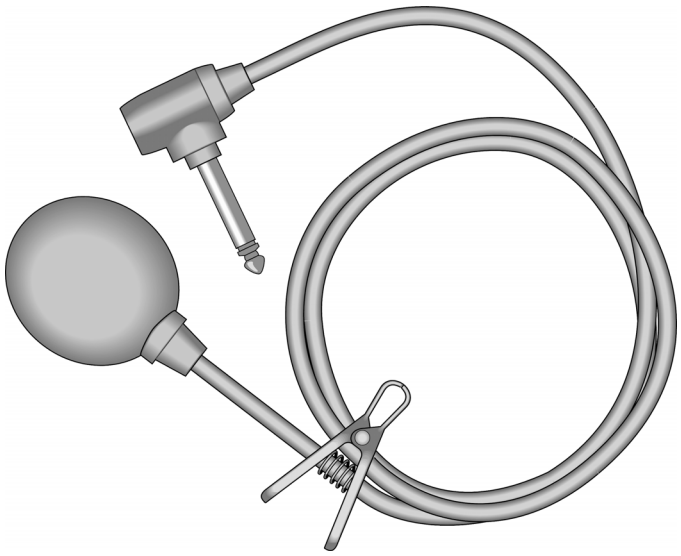
Figure 23: Dual air cord assemblies (Models 200-448 and 200-449)



These air cord assemblies provide nurse call capabilities for two patients at one patient station. Equipped with squeeze pad actuators, they are specifically designed for patients undergoing oxygen therapy.

- Model 200-448 is 6 feet (1.8 m) long.
- Model 200-449 is 10 feet (3.0 m) long.

Figure 24: Single air cord assemblies (Models 200-1071 and 200-1073)

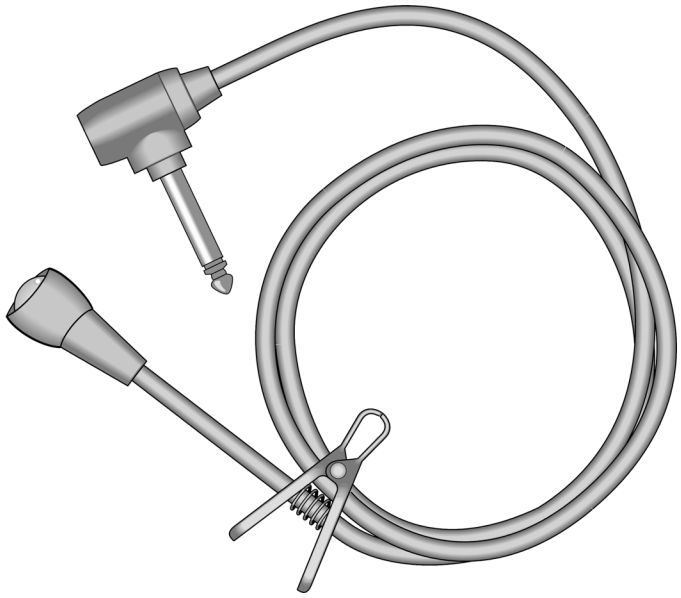


These air cord assemblies provide nurse call capabilities for one patient at a patient station. They are specifically designed for patients undergoing oxygen therapy. Both assemblies have large squeeze pad actuators for patients with impaired dexterity.

Model 200-1071 is 6 feet (1.8 m) long.

Model 200-1073 is 10 feet (3.0 m) long.

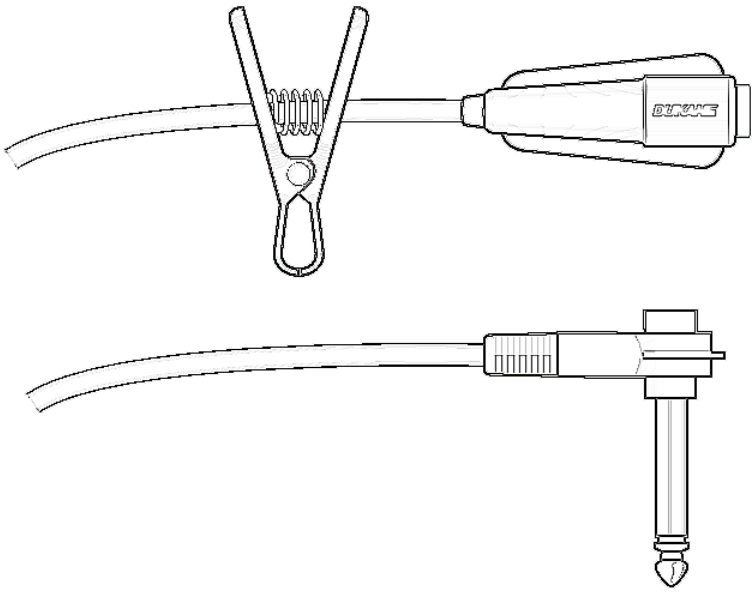
Figure 25: Air Operated Pushbutton Assembly (Model 200-1072)



This air cord assembly provides nurse call capabilities for one patient at a patient station. It is specifically designed for patients undergoing oxygen therapy. This assembly's pushbutton actuator facilitates use for patients with impaired dexterity.

Model 200-1072 is 8 feet (2.4 m) long.

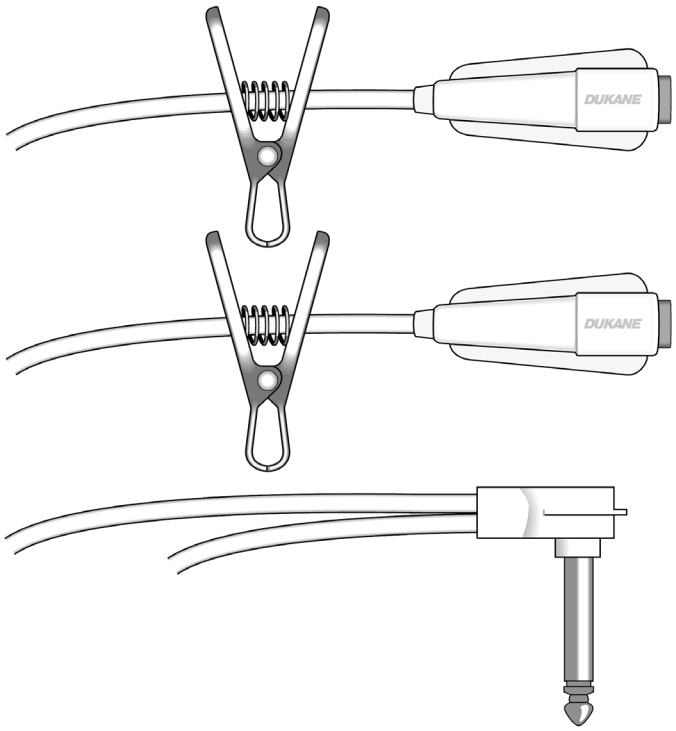
Figure 26: Single Call Cord Assemblies (Models 200-1171 and 200-1172)



These call cord assemblies provide nurse call capabilities for one patient at a patient station. The call cords have a momentary pushbutton switch.

- Model 200-1171 is 6 feet (1.8 m) long.
- Model 200-1172 is 12 feet (3.7 m) long.

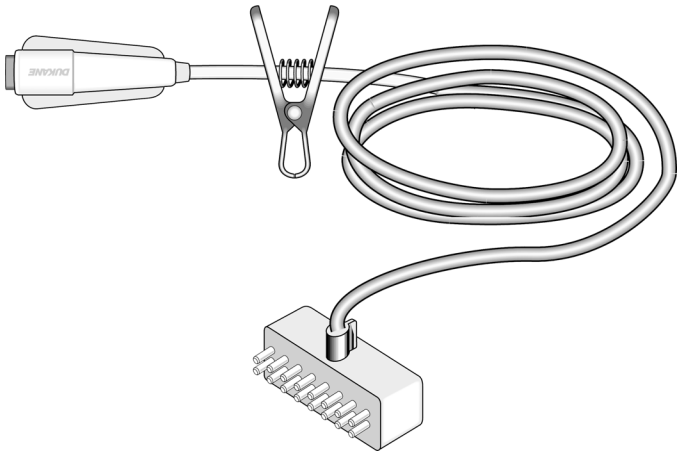
Figure 27: Dual call cord assemblies (Models 200-1173 and 200-1174)



These call cord assemblies provide nurse call capabilities for two patients at one patient station. The call cords have two momentary pushbutton switches.

- Model 200-1173 is 6 feet (1.8 m) long.
- Model 200-1174 is 12 feet (3.7 m) long.

Figure 28: Call cord assembly (Model 200-1272)



This assembly provides nurse call capabilities to one patient with one patient station. The call cord has a non-locking, momentary pushbutton switch. It also has a DuraPin connector.

Model 200-1272 is 12 feet (3.7 m) long.

Call cord assembly care

Staff can clean call cord assemblies using a soft cloth, sprayed or dampened with the disinfectant that your hospital maintenance staff typically uses (e.g., Sidex, Staphine, or even a 10% bleach/water solution).

Call cords can be cleaned and sterilized, but not immersed. DO NOT soak the cords.

Call cords and electronic bed nurse call buttons

Placing a nurse call using either a call cord or an electronic bed's nurse call button are two other methods, in addition to using a Smart Pillow Speaker, that are available for patients to communicate their needs to facility staff. The resulting call priorities and associated dome light and status flash rates are determined by patient priorities assigned either at the time of system installation, or modified at the staff console or annunciator.

Call cord methods

Because two different kinds of call cords exist, there are two ways to use a call cord to place a nurse call:

- Pressing the pushbutton on the end of a regular call cord
- Pressing the squeeze pad actuator on the end of a call cord

When a patient places nurse calls using a call cord, audio communications between the patient and the staff member use the speakerphone on the patient station on the wall.

Electronic bed control panel method

Placing a nurse call by pressing the nurse call button on an electronic bed's side-rail control panel is an easy and direct method for a patient to call for staff assistance.

When a patient places a nurse call using the electronic bed nurse call button, audio communications between the patient and staff member use the speakerphone on the patient station on the wall, or else use the electronic bed's speakers.

For information about the connection between the patient station and electronic bed controls, see "Electronic bed receptacles" on page 78. Refer to the electronic bed manufacturer's manual for further electronic bed operating instructions.

Using a call cord or bed button to place a call

To use a call cord or an electronic bed's nurse call button to make a nurse call:

1. Press the pushbutton or squeeze pad actuator on the end of the call cord, or press the nurse call button on the electronic bed side-rail panel. When you do, this happens:

- The Call status light on the patient station turns on to confirm nurse call placement.
- The call assurance tone sounds at the patient station.
- Associated corridor and zone lights turn on as follows:
- A steady white light for a patient station with a priority of patient normal
- Slow flashing amber for a patient station with a priority of patient priority
- Fast flashing amber for a patient station with a priority of patient emergency
    - Tones sound at staff consoles and annunciators, and at stations where staff follow is active.
    - A patient normal, patient priority, or patient emergency call row appears on staff consoles and unit annunciators.

2. The call may be placed on reminder at the staff console, until the staff member can answer it. When a call is placed on reminder, this happens:

- The Call light on the patient station slowly flashes.
    - Associated dome lights slowly flash the highest reminder color.

3. When the call is answered at a staff console or annunciator, this happens:

- The Status light on the patient station shows a steady green, indicating the audio connection.
- The Call light on the patient station extinguishes.
    - Dome light illumination for the original call and for any reminder ceases.

4. During the call, the patient should speak in a normal conversational tone.

- If the call was made using a call cord, audio communications use the patient station or the electronic bed's speakers.
- If the call was made by pressing the bed's nurse call button, audio communications use either the patient station or the electronic bed's speakers.

  Note: If necessary, the staff member can adjust call volume settings on the staff console or annunciator.

5. When the call ends, this happens:
    - The Status light extinguishes.
    - The nurse call row on the Call screen or the reminder row on the Reminders screen disappears.
    - After speaking with the patient, a staff member may proceed to the patient room.

Using a call cord or bed button to upgrade a call

Upgrading a call placed using a call cord or an electronic bed's nurse call button requires presence to already be registered in the patient room (See "Registering staff presence" on page 99.) To upgrade a call that a patient placed using a call cord or an electronic bed's nurse call button to more urgent status:

1. Press the nurse call button on the call cord or bed side-rail control panel (or squeeze the call cord's actuator) twice in rapid succession. When you do, this happens:
    - The call assurance tone sounds at the patient station.
    - Top light sections of associated corridor and zone lights fast flash red.
    - On 4-section dome lights, the second light sections down show a steady white.
    - Staff consoles and annunciators show two calls — the staff emergency call and the original call (the latter call clears when the staff emergency call is canceled).
    - Staff emergency tones sound at staff consoles and annunciators, and at stations here staff follow is active.
2. When the staff emergency call is answered at the staff console, this happens:
    - All communication between the patient room and the staff console attendant is over the speakerphone on the patient station.
    - The Status light on the patient station shows a steady green.
3. During the call, communication from the patient room can take place in a normal conversational tone via the speakerphone in the patient station on the wall.

    Note: If necessary, the staff member can adjust call volume settings on the staff console or annunciator.
4. When the call ends, this happens:
    - The Status light changes from a steady green to a steady red.

- Once communications with those in the patient room have ended, one or more additional staff members may proceed to the patient room.

Canceling calls placed from call cords or bed buttons

Regular patient normal calls made by patients using call cords or electronic bed buttons are canceled when answered at the staff console or annunciator. If a regular call cord or bed button call was not answered, or if such a call was upgraded, the call is canceled in the same way that a call placed directly from a patient station is canceled:

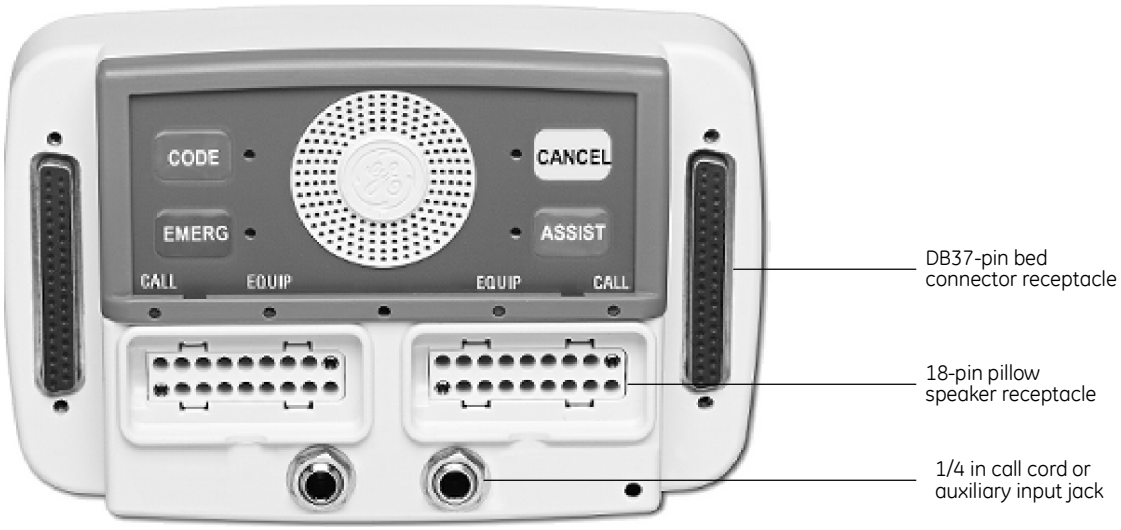
1. Press the Cancel button on the patient station or on any associated station in the patient room. When you press Cancel, this happens:
   - Status and Call lights, along with associated dome lights, extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The nurse call row disappears (two nurse call rows disappear if a call cord or bed button call was upgraded) from staff consoles and annunciators.

Patient station receptacles

Telligence patient stations can have from four to six front panel receptacles. The illustration below shows a Dual patient station which has six receptacles.

Note: Depending on how a patient station was configured, patient station 1/4-inch jacks can be used for call cords only, for auxiliary medical equipment only, or can be programmed to prompt at the time of use for one of these modes.

Figure 29: Dual patient station with BedConnect receptacles



Dual patient station receptacles

Dual patient stations, which provide nurse call communications for two patient beds, provide the following input receptacles:

- Two external DB 37-pin bed connector receptacles (on patient stations with BedConnect), or two rear (internal) bed interface headers (on standard patient stations)
- Two 18-pin Smart Pillow Speaker connector receptacles
- Two 1/4-inch auxiliary input jacks, configurable for bed call cord input or medical equipment input, or programmable for either type of input

Single patient station receptacles

Single patient stations, which provide nurse call communications for one patient bed, provide the following input receptacles:

- One external DB 37-pin bed connector receptacle (on patient stations with BedConnect), or one rear (internal) bed interface header (on standard patient stations)
- One 18-pin Smart Pillow Speaker connector receptacle
- Two 1/4-inch auxiliary input jacks, configurable for bed call cord input or medical equipment input, or programmable for either type of input

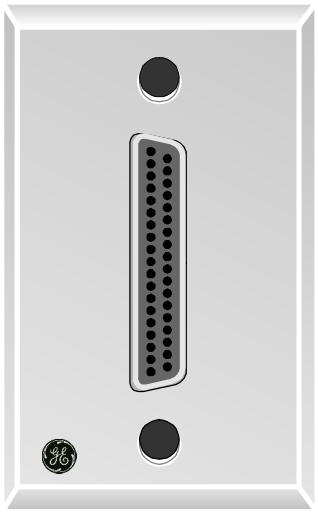
Electronic bed receptacles

For Telligence patient stations with 37-pin bed receptacles provide for one or two communications connections (respectively) between electronic beds supplied by Hill-Rom or Stryker and the Telligence nurse call system.

Single bed receptacles

In the case of patient stations without 37-pin receptacles, Telligence provides the HC-BID-SS37 Single Bed Receptacle to allow Hill-Rom or Stryker electronic beds to connect to the patient stations.

Figure 30: Single bed receptacle



Patient stations without BedConnect have receptacles on the back of the stations that are wired to these single bed receptacles, which are separate 37-pin bed receptacles installed in the wall. When electronic bed control panels are connected to the Telligence bed receptacles, the panels are connected to patient stations.

The HC-BID-SS37 Single Bed Receptacle is typically installed on the headwall, near the floor. In rooms with more than one bed, one bed receptacle is located on the headwall by each bed. One electronic bed can be connected to a Single patient station via one bed receptacle; two electronic beds are connected to a Dual patient station via two bed receptacles.

Notes

- You can also use a bed receptacle provided by Hill-Rom or Stryker.
- Avoid plugging both a smart bed and a smart Pillow Speaker into the same patient station. Some smart beds interfere with smart pillow speakers, with the result that both devices stop functioning. To be safe, use a standard Smart Pillow Speaker with a smart bed.

Connecting call cords and auxiliary medical devices

Patient stations that set to *Prompt for status mode* during installation accept either for call cords or for auxiliary medical equipment. The choice of one device type or the other must be made at the time the device is connected to the patient station.

To set the jack to accept call cords:

1. Insert the plug into the jack. Both the EQUIP and CANCEL indicator lights flash on and off at half-second intervals.
2. Without placing any calls, wait 6 seconds until the indicator lights stop flashing and return to normal. This sets the jack to accept the call cord.

To set the jack to accept auxiliary medical equipment:

1. Insert the plug into the jack. Both the EQUIP and CANCEL indicator lights flash on and off at half-second intervals.
2. Immediately press the Cancel button. The EQUIP indicator stops flashing and glows steadily. The CANCEL light goes off.

Note: Plug in only one device at a time when connecting more than one device. The second device cannot be configured until the indicator lights for the first device have normalized.

- Removing the device from the jack simulates device failure and places a call
- Re-inserting it restarts the flash cycle

Removal of pull cords at patient stations

Any cord removal (a Smart Pillow Speaker, bed, auxiliary, or call cord) from the patient station causes the following to happen:

- The Cancel and Call lights on the patient station start flashing (if the cord that was removed was for an auxiliary device, the Cancel and Equip lights flash).
- If the cord remains out of the receptacle for more than 5 seconds:
- The Cancel light extinguishes, and the Call (or Equip) light glows steadily.

- A cord pull nurse call row appears on staff consoles and unit annunciators.
- Associated dome lights illuminate.

Preventing cord pull nurse calls

To prevent a cord pull call from being placed, do the following:

1. Press the Cancel button within five seconds of cord removal.
   - The Cancel light extinguishes.
   - The Call (or Equip) light starts fast flashing, indicating that a cord is out. No nurse call row appears on staff consoles and annunciators, and no dome lights turn on.

Canceling calls placed from cord pulls

To cancel a cord pull nurse call:

1. Press the Cancel button.
   - The cord pull nurse call row disappears from staff consoles and annunciators.
   - Dome lights extinguish.
   - The Call (or Equip) light starts fast flashing, indicating that a cord is out.

Note: Pressing Cancel after a bed, Smart Pillow Speaker, or call/auxiliary cord has been removed clears the nurse call, until the device is reinserted and removed again.

Clearing the cord pull alarm

To stop the light flashing due to cord removal:

1. Plug a cord into the station jack.

   Both the Cancel light and the Call (or Equip) light flash for a few seconds, then extinguish.

   If you need to program the auxiliary input jack, see "Connecting call cords and auxiliary medical devices" on page 79.

Miscellaneous patient stations

Of the many peripheral Telligence stations that can be located in patient rooms, only a few are intended for patient use. Call cord stations may be present in the patient room, or may be located in treatment rooms, post-surgical recovery rooms, etc. Lavatory stations are typically present in both patient bathrooms and facility bathrooms.

This section describes the operation of the simpler stations that are often used by patients themselves. For information on peripheral

stations used only by staff, see Chapter 5 "Staff/duty stations" starting on page 89.

Call cord stations

The call cord on the HC-CCSTN call cord station provides patients with a simple means of placing a nurse call. Depending on station configuration, pressing the button at the end of the station's call cord places a nurse call with a priority of either patient normal, patient priority, or patient emergency.

Figure 31: Call cord station

A call cord station may be associated with other stations; or it may be a standalone station with its own identifiable location (for instance, as the sole station in an exam room). Call cord stations have no audio capability and cannot be used to communicate with staff members at staff consoles or annunciators.

1. Press the button at the end of this station's call cord to place a nurse call. When you do so, the following happens:
   - The Call lights on any associated patient or staff/duty station turn on.
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Associated corridor and zone lights turn on according to the call cord station's configured priority:
   - For patient normal, dome lights show a steady white light.
   - For patient priority, dome lights slowly flash an amber light.
   - For patient emergency, dome lights fast flash an amber light.
   - Tones sound at staff consoles and annunciators, and at stations where staff follow is active.

- A nurse call row, with the corresponding call priority, appears on staff console and unit annunciator Call screens.

2. Press the Cancel button on the call cord station or on the patient station to cancel the nurse call.
   - Call lights and dome lights extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The nurse call row disappears from staff console or annunciator Call screens.

   If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:
   - Dome light display of the staff level reminder ceases.
   - The reminder row disappears from staff console or annunciator Reminders screens.

Lavatory stations

The HC-PP-LAV lavatory station is waterproof and doubles as a shower station. If two or more of these stations are located in a bathroom, their buttons and optional pull cords may be linked. Pressing the Help button or pulling the station's call cord places a nurse call with a priority of lavatory emergency. This station has no audio capability and cannot be used to communicate with staff members at a staff console or annunciator.

Figure 32: Lavatory station (shown without pull cord)

A lavatory station is typically associated with patient stations, but sometimes is associated with Smart Staff/Duty Stations. It also may be a standalone station with its own identifiable location (for instance, as the sole station in a hallway bathroom). This lavatory

station may light a single-section dome light by the bathroom inside the patient room.

1. Press the Help button, or pull the cord (if the station has one), to summon assistance from staff members. Doing so causes the following to happen:
   - The lavatory station Help light turns on.
   - Any associated patient or staff/duty station's Call lights turn on.
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Top light sections in associated corridor and zone lights fast flash red.
   - The lavatory emergency tone (slow beeping) sounds at staff consoles and all annunciators, at associated audio stations in the patient room when presence is registered, and at stations where staff follow is active.
   - A lavatory emergency nurse call row appears on the Call screens on staff consoles and all annunciators.
2. Press the Cancel button on the original lavatory station, or on any associated station in the patient bathroom, to cancel the lavatory emergency call.
   - The lavatory station's Help light extinguishes.
   - Call lights and dome lights extinguish.
   - Sounds of the lavatory emergency tone stop.
   - The lavatory emergency call row disappears from staff consoles and annunciators.

   If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:
   - Dome light display of the staff level reminder ceases.
   - The reminder row disappears from staff console or annunciator Reminders screens.

Note: Lavatory emergency calls can be canceled *only* at the originating station, or at another linked station in the same patient bathroom.

Two-priority lavatory stations

Another type of lavatory station may be used in your facility: one which permits placement of two different priority levels of nurse calls. The station is waterproof and can double as a shower station.

The two-priority lavatory station (see Figure 33, below) provides an Emerg button in addition to a Help button. By pressing Emerg or

pulling the pull cord, a patient or staff member places a lavatory emergency call.

Pressing the Help button places a patient normal call for staff assistance in the patient bathroom. This station is not capable of lighting a dome light by the bathroom inside the patient room.

Figure 33: Two-priority lavatory station (shown with pull cord)

Placing a lavatory emergency call

1. Press the Emerg button or pull the station's cord to summon emergency assistance from staff members. Doing so causes this to happen:
   - The station's Emerg light turns on.
   - Any associated patient or staff/duty station's Call lights turn on.
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Top light sections of associated corridor and zone lights fast flash red.
   - The lavatory emergency tone (slow beeping) sounds at staff consoles and all annunciators, at associated stations in the patient room when presence is registered, and at stations where staff follow is activated.
   - A lavatory emergency nurse call row appears on the Call screens on staff consoles and all annunciators.
2. Press the Cancel button on the original lavatory station, or on any associated station in the patient bathroom, to cancel the lavatory emergency call.

- The lavatory station's Emerg light extinguishes.
- Call lights and dome lights extinguish.
- Sounds of the lavatory emergency tone stop.
- The lavatory emergency call row disappears from staff consoles and annunciators.

If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:

- Dome light display of the staff level reminder ceases.
- The reminder row disappears from staff console or annunciator Reminders screens.

Note: A call with a lavatory emergency priority can be canceled only at the originating station (or at another associated station in the patient bathroom).

Placing a patient normal call

1. Press the Help button to summon assistance of a non-emergency nature from staff members. Doing so causes the following to happen:
   - The lavatory station's Help light turns on.
   - Any associated patient or staff/duty station's Call lights turn on.
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Associated corridor and zone lights show a steady white.
   - Tones sound at staff consoles and unit annunciators, and at stations where staff follow is active.
   - A patient normal nurse call request row appears on the Call screens on staff consoles and unit annunciators.
2. Press the Cancel button on the original lavatory station, or on any associated station in the patient bathroom, to cancel the lavatory emergency call.
   - The lavatory station's Help light extinguishes.
   - Any associated patient or staff/duty station's Call status light extinguishes.
   - Dome lights extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The patient normal nurse call row disappears from staff consoles and annunciators.

   If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:

- Dome light display of the staff level reminder ceases.
- The reminder row disappears from staff consoles and annunciators.

Note: A patient normal call is cleared from the system when a staff member finishes answering the call at a staff console or annunciator.

Cleaning patient stations

Cleaning mode temporarily deactivates station buttons so associated stations can be cleaned without danger of changing the status of nurse calls during the cleaning process.

Note: Because patients cannot place nurse calls when stations are in cleaning mode; it may be best to clean stations when no patients are occupying beds in the room.

To clean a patient station and any associated stations:

1. Ensure that all calls on associated patient room stations have been canceled.
2. Spray or soak a soft cloth with the disinfectant typically used by your facility's maintenance staff (e.g., Sidex, Staphine, or a 10% bleach/water solution).
3. Ensure that the station to be cleaned is idle (no light should be lit or flashing).
4. Press and hold down the patient station's Cancel button for about 4 seconds.
   - The patient station emits two feedback tones while you are holding down the Cancel button.
   - The station and any associated stations enter a 15-second cleaning mode period, shown by the flashing of the patient station's Cancel light.

Notes

- A different amount of time for cleaning mode may be configured at your facility.
- If not finished cleaning a station by the time the Cancel light stops flashing, put the station into cleaning mode again.

5. Gently wipe the surface of the station with the damp cloth.
6. Clean any associated cords using the damp cloth.
7. Use another soft, dry cloth to wipe the surface of the station and cords dry.

Notes

- Microfiber cloth is recommended for cleaning Telligence stations.

- Do not use abrasive cleaning agents.
- Do not soak Smart Pillow Speaker cords, call cords, or any other cords.

Resolving patient room station problems

Resolutions to some problems that may occur at patient room stations are presented here.

Errors at patient stations

If a patient station or an associated peripheral station in the patient room malfunctions in some manner, the patient station indicates the error by a flashing red Status light. The flash rate of the light indicates the type of error.

To resolve patient room station errors:

- For about 8 seconds, press the patient station Cancel button or any linked Cancel button in the patient room.
- Four feedback tones sound and all patient station light fast flash for 3 seconds.
- Device error nurse call rows momentarily appear on staff consoles and annunciators, accompanied by momentary fast beeps.

Note: Holding down a patient station or linked Cancel button for 8 seconds clears all calls from the room that are currently in the system, clears associated room devices, and causes associated dome lights to extinguish.

If pressing a patient room Cancel button for 8 seconds does not resolve the problem, contact the GE Security Technical Services Department at 1-800-385-2639 during normal business hours.

Resetting a hung presence station

If pressing the button corresponding to your staff level fails to clear the presence registry, use the Cancel button on the associated patient station, as follows:

To remove a "stuck" presence, do the following:

1. For about 6 seconds, press the patient station Cancel button or any linked Cancel button in the patient room.
    - Three feedback tones sound and the Cancel light flashes.

If pressing the Cancel button for 6 seconds does not clear a "stuck" presence, contact the GE Security Technical Services Department at 1-800-385-2639 during normal business hours.

Note: The presence station is described in Chapter 4 on page 71, since it is intended for staff use only.

Chapter 5
Staff/duty stations

Summary

Telligence staff/duty stations are installed in staff rooms. They support a variety of staff call devices that enable staff members to communicate with staff consoles and annunciators. This chapter provides background information and instructions for using staff/duty stations and other nurse call stations that are intended for staff use only.

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Overview of staff/duty stations

Smart Staff/Duty Stations are major Telligence System tools that permit staff members to send nurse call alerts to staff consoles and annunciators. They also allow communications with staff who are responding to these nurse call alerts.

Figure 34: Smart Staff Duty Station (Model HC-DUTY)

Basic functions

Communicating with the nursing station

A staff/duty station is similar to a patient station, except that it has no receptacles or plugs for beds and other equipment. Staff/duty stations are used solely by staff members to call the nursing station. Like patient stations they are equipped with speaker phones and command buttons. One staff/duty station can cannunciate call activity for a single duty area or an area equal to a staff console coverage area.

Forwarding nurse calls from room to room

In duty mode, a staff/duty station annunciates nurse calls and reminders associated with other rooms. When a staff member enters a room and registers presence, the staff station emits tones indicating active nurse calls and reminders. This is called staff follow, and the tones are called staff follow tones. Some stations are configured to remain in duty mode. These are called permanent duty stations. Other staff/duty stations can be switched from one mode to the other by a staff member.

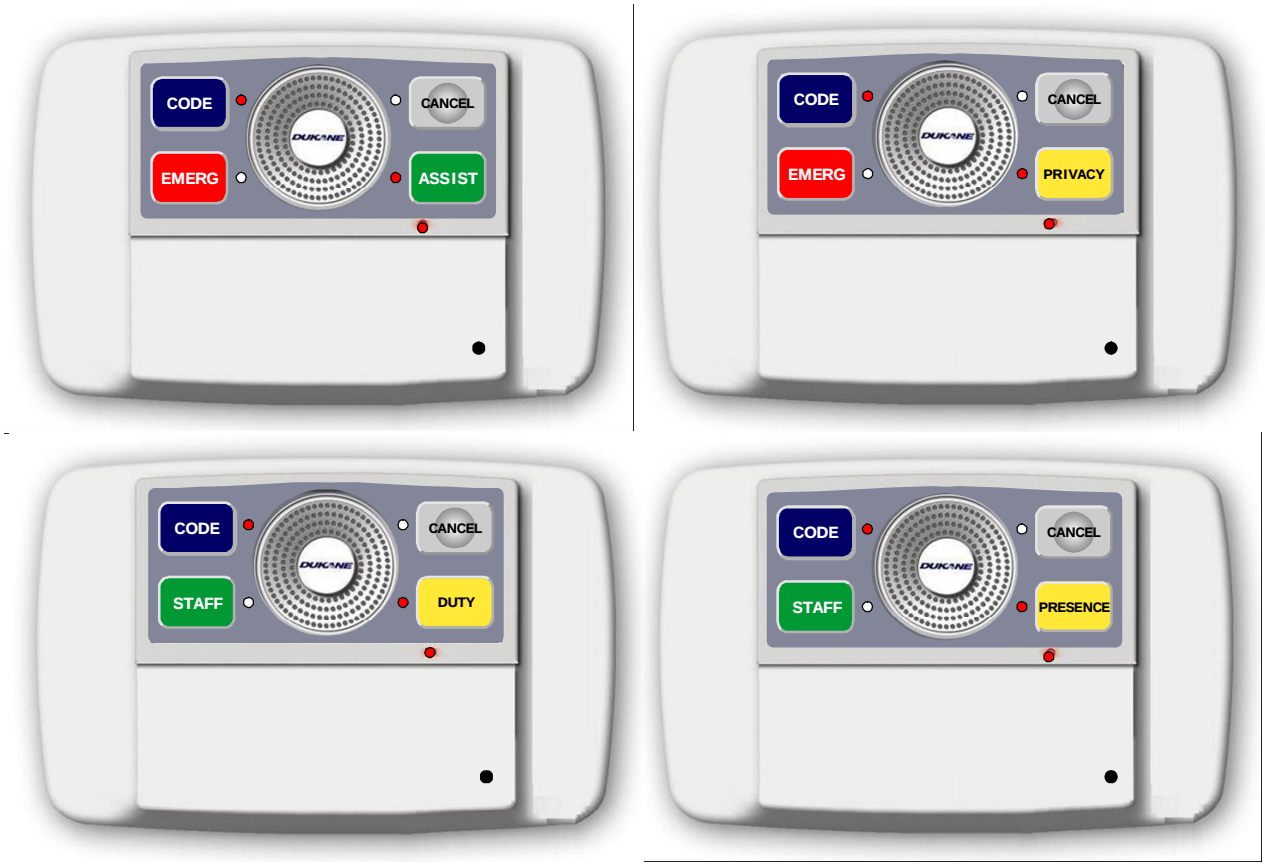
Staff/Duty station command buttons

The following table lists the command buttons typically found on staff/duty stations.

Table 6: Standard command buttons for staff/duty stations

Button	Description
CODE	Alerts staff about a code blue emergency.
EMERG	Alerts staff about an emergency.
ASSIST	Sends a request for staff assistance.
STAFF	Sends a request for staff assistance
DUTY	Switches Duty mode on or off, which enables or disable staff follow tones
PRESENCE	Registers the presence of a staff member in the room
PRIVACY	Mutes outgoing audio. This button is present on permanent duty stations only
CANCEL	Clears calls

Figure 35: Staff/duty station standard button templates



Custom button kit

Some facilities may want to order the Telligence System custom button kit so they can rename one or more of the standard buttons shown above. Other facilities may order the kit if they need to install Smart Staff/Duty Stations with buttons that cause other functions, already defined in the Telligence System, to be performed.

Customers requesting staff/duty station functions that are not defined in the Telligence System must do so on a totally custom basis.

Notes

- If your facility has relabeled some or all of the standard buttons, or uses buttons that provide custom functions, make note of the custom button labels in the margin.
- Documentation for the use of custom buttons is beyond the scope of this manual; please contact your supervisor for instructions on their use.

Staff/duty station lights

Two white “front light“ lights, one for each button or vertical pair of buttons, are present on Smart Staff/Duty Stations to illuminate the buttons in dim light conditions.

Additional lights indicate specific states:

- Each staff/duty station button has an associated light.
- Call lights show the status of nurse call requests from a station.
- One bi-color Status light on the staff/duty station signals audio connection, staff follow, presence, privacy, or error.

The following section describes how the system responds when a call is placed by pushing a staff/duty station command button.

Individual button lights

- A steady red button light indicates that the button was pressed and that the following actions, specific to each button, have taken place:
- For the Code, Emerg, and Assist button lights, a nurse call was placed.
- For the Privacy button, privacy mode was put into effect.
- The Cancel light flashes when Cancel is pressed to remove a “stuck“ presence.
- All lights in slow flash indicates that the station is in cleaning mode.
- All lights in fast flash indicates a no communications error.

Call status light

- A steady red Call status light indicates that a staff member has placed a nurse call by pressing the Code, Emerg, or Assist button on the staff/duty station, or on any station associated with the staff/duty station.
- A flashing red Call status light indicates an alarm condition.

Status light

- A steady red Status light indicates that a staff member has registered presence.
- A flashing red Status light indicates a staff follow call. The flash rate is based on the priority of the call.
- A fast flashing red Status light indicates an alarm condition; the flash rate indicates the error type. (See "Resolving staff station problems" on page 115.
- A steady green Status light indicates an ongoing audio connection.

- A slow flashing green Status light indicates the staff/duty station is in privacy mode.

Because the Status light indicates a number of conditions, the light has assigned priorities for indicating these conditions:

- An alarm condition is signaled before any other condition.
- Staff follow indication is given the next highest priority.
- Privacy mode indication is given the next priority.
- An ongoing audio connection has the next priority in light indication.
- Finally, if no other condition exists, registered presence is indicated.

Staff/Duty station tone alerts

Smart Staff/Duty Stations, like all audible devices in the Telligence system, sound the same note but vary the pattern — from a rapidly repeating tone, through a slowly repeating tone, to a continuous tone — for the various call priorities and other factors in the system.

- Pre-alert: The staff/duty station beeps once when an initial call or a call answering a nurse call is received from a staff member at a staff console or annunciator.
- Call assurance: The call assurance tone (8 short beeps, lasting 2 seconds) sounds at the staff/duty station when a call is placed from the station or from an associated non-audio station.
- Lavatory: When an emergency call has been made from a lavatory station associated with a staff/duty station, the in-room lavatory emergency tone (slow beeping) sounds at the staff/duty station when presence is registered for the room.
- Staff follow: For Smart Staff/Duty Stations that have been placed in duty mode, staff follow tones sound when a staff member registers presence.

Notes

- The staff follow tone pattern that sounds is for the highest priority nurse call in the duty area or nursing unit at present — with one exception: an in-room lavatory emergency tone will sound instead of any other nurse call.
- The staff/duty station also sounds one or more feedback tones when its Cancel button is held down for two or more seconds.

Placing a call from a smart staff/duty station

Nurse calls of a variety of priorities can be made from the Telligence staff/duty station.

Code blue calls

Press the Code button on the staff/duty station to send a code blue call to staff consoles and annunciators. Pressing Code causes the following to happen:

- Lights by the staff/duty station Code button and by any linked Code button turn on to confirm code blue call placement.
- The Call status light on the staff/duty station turns on to confirm nurse call placement.
- The call assurance tone sounds at the staff/duty station.
- All light sections of associated corridor and zone lights fast flash blue.
- Associated zone lights emit a very fast, repeating buzz.
- Code blue tones sound at staff consoles and annunciators, and at stations where staff follow is active.
- A code blue nurse call row appears on the Call screen on staff consoles, emergency annunciators, and unit annunciators.

Staff emergency calls

Press the Emerg button on the staff/duty station to send a staff emergency call to staff consoles and annunciators. Pressing Emerg causes this to happen:

- Lights by the staff/duty station Emerg button and by any linked Emerg button turn on to confirm staff emergency call placement.
- The Call status light on the station turns on to confirm nurse call placement.
- The call assurance tone sounds at the staff/duty station.
- Top sections of associated corridor and zone lights fast flash red.
- Associated zone lights emit a very fast, repeating buzz.
- Staff emergency tones sound at staff consoles and annunciators, and at stations where staff follow is active.
- A staff emergency nurse call row appears on the Call screen on staff consoles, emergency annunciators, and unit annunciators.

Staff normal calls

Press the Assist button to send a staff normal call to staff consoles and annunciators. Pressing Assist on the staff/duty station causes the following to happen:

- The Assist status light and the Call status light on the staff/duty station turn on to confirm placement of the staff normal call.
- The call assurance tone sounds at the staff/duty station.

- Associated corridor and zone lights show a steady white.
- Associated zone lights emit a slow repeating buzz.
- Staff normal tones sound at staff consoles and annunciators, and at stations where staff follow is active.
- A staff normal nurse call row appears on the Call screen on staff consoles and unit annunciators.

Canceling a call from the smart staff/duty station

Press the Cancel button on the staff/duty station to cancel a code blue alert, staff emergency alert, or a normal priority call placed from the staff/duty station.

— or —

Press any linked Cancel button to cancel calls from the staff/duty station.

Pressing Cancel on or for the staff/duty station causes the following:

- Dome lights and staff/duty station lights extinguish.
- Tones sounding at staff consoles/annunciators and staff follow-activated stations cease.
- The Call screen nurse call row and any corresponding Reminders screen reminder row on staff consoles and annunciators disappear.

Notes

- Normal priority calls, including staff normal nurse calls, are canceled after staff members answer them at staff consoles or annunciators.
- Pressing the Cancel button for 8 seconds (and 4 feedback tones) on a staff/duty station or associated room station clears all calls made from the room, and all reminders for those calls.

Activating staff follow at a staff/duty station

In staff/duty stations configured with an active staff follow mode, duty mode can be switched on or off. This is not try of permanent duty stations, in which staff follow is always active.

To turn duty mode on or off:

1. Press the Duty button on the staff/duty station. If any calls are active in the station's coverage area, the staff follow tone sounds and the Status light flashes red to annunciate the highest priority call.
2. Press the Duty button again to cancel duty mode.

Notes:

- If more than one room has a registered staff presence, calls may repeatedly annunciate at the Smart Staff/Duty Stations in those rooms.
- If a staff member has registered presence in a room with a staff/duty station configured for staff follow, the station will annunciate calls even if duty mode is turned off on the station.

To temporarily silence ongoing staff follow tones at regular Smart Staff/Duty Stations:

Press the Cancel button.

Staff follow tones temporarily stop at the station, but resume after:

- A new staff follow call occurs
- A silence timeout is over at the staff/duty station
- An audio connection is made to the staff/duty station
- An emergency call is made from the staff/duty station
- The second press of the Cancel button on the staff/duty station or on a station associated with the staff/duty station

Note: Some states in the U.S.A. do not allow the muting of staff follow tones.

Registering staff presence

Registering presence is an optional Telligence feature. Staff presence can be registered at presence stations in patient rooms. In such cases, presence stations are associated with all patient room stations, and presence is registered for the entire room, even if there are multiple patient stations in the room. Presence stations can also be located in staff rooms, associated with staff/duty and other peripheral stations. Presence levels that can be registered at presence stations are:

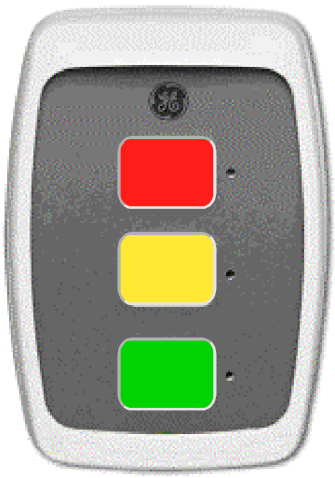
- Red: The highest staff level priority, RN
- Amber: The middle staff level priority, LPN
- Green: The lowest staff level priority, Nurse's Aide

Registering any level of presence activates staff follow at the patient or staff/duty station. You can also register presence to signal that a doctor is in a room with a patient, that a baby is in a room with its mother, or that a room needs charting.

Presence stations

The HC-PP3-PRES presence station allows staff members to signal their presence in the room where the station is located.

Figure 36: Presence station



To register presence at a presence station, press the button that corresponds to your staff level. When presence is registered, the following happens:

- The light by the button pressed on the presence station turns on.
- The Status light on the associated patient or staff/duty station shows a steady red.

- If an in-room lavatory emergency call has been made, slow beeps sound at the patient station and at the staff/duty station.
- Any current staff follow tone sounds for two seconds at any associated patient station and repeatedly at any associated staff/duty station.
- Any associated dome light steadily turns on (by default, in red, amber or green in the third light section down on a 4-section dome light, or in the bottom section of a 2-section dome light).

Note: If more than one presence level is registered, dome lights turn on in the color representing the highest presence level.

- Normal priority calls for the room, and reminders for normal calls for the room with staff priorities that match or are lower than your staff level, are canceled.
- Normal priority calls for the room with higher-level staff priority reminders than your staff level are not canceled.
- Reminders with nurse call priorities more urgent than normal priority but with matching or lower-level staff priorities are hidden at the corridor/zone light.

Note: Unless the staff member handles the calls and cancels them at a room station, the reminders remain active and the corridor/zone light redisplays them when presence is removed.

Removing registered presence

To remove registered presence at a presence station, press the button that you pressed before to register your presence. When you do this, the following happens:

- The light by the presence station button extinguishes.
- Status lights on associated patient or Smart Staff/Duty Stations extinguish.
- The presence indication at the dome light disappears.
- If any call reminders remain active, the corridor/zone light redisplays them.
- In-room lavatory emergency and staff follow tones cease.

Staff follow function

The optional Telligence staff follow feature lets staff members hear nurse call alerts when they are not near a staff console or annunciator.

Staff follow allows nurse calls (with normal, priority, and emergency priorities) placed at other stations, as well as reminders set at staff consoles, to cause lights to flash and tones to sound at patient and Smart Staff/Duty Stations where staff follow is activated. When there is more than one staff follow nurse call, the highest priority staff follow nurse call tone sounds.

Staff follow modes

The staff follow function, configured using the Telligence Configuration Tool at system installation time, is always enabled in the Telligence System. When Telligence was installed at your facility, Smart Staff/Duty Stations were assigned one of these staff follow modes:

- Duty area mode: The staff/duty station annunciates calls originated in its duty area.
- Console mode: The staff/duty station annunciates calls originated in its assigned staff console's coverage area, which may comprise multiple duty areas, or possibly one or more nursing units.

Note: Unlike permanent duty stations, regular Smart Staff/Duty Stations can also be configured to *not* annunciate any staff follow tones.

Overview of permanent duty stations

Basic function

Permanent duty stations are used for annunciating nurse calls. They always annunciate staff follow calls, and for this reason they are typically located in staff-only rooms, such as on-call rooms, where it is vital to stay in touch with patient events. Permanent duty stations are typically located away from patient rooms and staff lounges, where quiet atmospheres prevail. Tones cannot be silenced on permanent duty stations.

Permanent duty stations cannot be used to place nurse calls. They can however, be used to answer calls from the nursing station or an annunciator.

Permanent duty stations have only two buttons: Privacy for muting outgoing audio, and Cancel for clearing calls.

Figure 37: Permanent duty station

Staff follow at permanent duty stations

The staff follow function is *always* activated on permanent duty stations.— the station always annunciates nurse calls.

- When nurse calls are received by the system, permanent duty station Status lights start flashing red at the rate of the highest priority call in the coverage area.
- When nurse calls are received by the system, permanent duty stations start repeatedly sounding a tone at the rate of the highest priority call in the coverage area.

Other staff stations

Most peripheral stations in patient rooms are intended for use by the facility's staff only, although they may operate in concert with patient stations. Peripheral stations can also be located in staff rooms, operating in standalone mode or in conjunction with Smart Staff/Duty Stations. Stations intended for staff use only include presence stations, code blue stations, staff emergency stations, call stations, remote cancel stations, and auxiliary input stations.

Code blue stations

The HC-PB2-CODE code blue station lets staff immediately alert other staff about extreme emergency situations. Most often found in intensive care units, emergency care rooms, and other patient care rooms, the station may also be located in staff-only rooms, if only as a precautionary measure for facility staff.

Figure 38: Code blue station (shown without pull cord)

The code blue station can be a standalone station, or can be associated (and have its buttons linked) with either a patient station or a staff/duty station. A code blue station has no audio capability, and cannot be used to communicate with staff members at staff consoles or annunciators.

An HC-PB2-CALLR call station may be reconfigured as a code blue station if a cardiac arrest clock must be started, or if any other device must be started or stopped for emergency purposes, by pressing the station's Code button (or pulling the station's optional pull cord).

1. Press the Code button on the code blue station (or pull the optional cord) to send a code blue call to staff consoles and annunciators.

Pressing the Code button (or pulling the cord) causes the following to happen:

- lights by the station's Code button and by any linked Code buttons turn on to confirm code blue call placement.
- Any associated patient or staff/duty station's Call lights turn on.
- The call assurance tone sounds at any associated patient or staff/duty station.
- All light sections in associated corridor and zone lights fast flash blue.
- Code blue tones sound at staff consoles and annunciators, and at stations where staff follow is active.
- A code blue nurse call row appears on the Call screen on staff consoles, emergency annunciators, and unit annunciators.

2. To cancel the code blue call, press Cancel on the originating code blue station, or a linked Cancel button on any associated patient or staff room station.
   - Code button lights extinguish.
   - Any associated patient or staff/duty station's Call lights extinguish.
   - Dome lights extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The nurse call row disappears from staff consoles and annunciators.

   If the code blue call had a reminder set for it, the following happens when the Cancel button is pressed:
   - Dome light display of the staff level reminder ceases.
   - The reminder row disappears from staff console or annunciator Reminders screens.

Note: A code pink station is sometimes used by hospitals to differentiate pediatric (code pink) emergencies from adult (code blue) emergencies. Functionality of the code pink station is identical to that of the code blue station, except that all light sections in associated dome lights fast flash pink, and code pink nurse call rows are pink.

Staff emergency stations

The HC-PB2-Emerg staff emergency station provides a way for staff to immediately alert other staff of emergency situations. Typically located in intensive care units, emergency care rooms, and other

patient care rooms, the staff emergency station may also be located in staff-only rooms, as a precautionary measure for facility staff.

Figure 39: Staff emergency station (shown without pull cord)

The staff emergency station may be equipped with a pull cord, can be a standalone station, or can be associated with a patient station or a staff/duty station. A staff emergency station has no audio capability, and cannot be used to communicate with staff members at staff consoles or annunciators.

An HC-PB2-CALLR call station may be reconfigured as a staff emergency station if a medical device must be started or stopped in an emergency by pressing the Emerg button (or pulling the optional pull cord).

1. Press the Emerg button (or pull the cord) on the staff emergency station to send a staff emergency call to staff consoles and annunciators.
    - lights by the station's Emerg button and by any linked Emerg buttons turn on to confirm staff emergency call placement.
    - Any associated patient or staff/duty station's Call lights turn on.
    - The call assurance tone sounds at any associated patient or staff/duty station.
    - Top light sections on associated corridor and zone lights fast flash red.
    - Staff emergency tones sound at staff consoles and annunciators, and at stations where staff follow is active.
    - A staff emergency nurse call row appears on the Call screen on staff consoles, emergency annunciators, and unit annunciators.

2. To cancel the staff emergency call, press the Cancel button on the originating staff emergency station, or on any associated patient or staff room station.
    - Emerg button lights extinguish.
    - Any associated patient or staff/duty station's Call lights extinguish.
    - Dome lights extinguish.
    - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
    - The nurse call row disappears from staff consoles and annunciators.

    If the staff emergency call had a reminder set for it, the following happens when the Cancel button is pressed:

    - Dome light display of the staff level reminder ceases.
    - The reminder row disappears from staff console or annunciator Reminders screens.

Call stations with smoke input

The model HC-PB2-CALLIN call station is a generic nurse call station. This two-button station may be equipped with a pull cord, can be a standalone station, or can be associated with a patient or staff/duty station. The station may be installed in a patient room or other rooms where patients are temporarily located, such as exam or recovery rooms, or it may be located in various staff rooms. A call station has no audio capability, and cannot be used to communicate with staff members at staff consoles or annunciators.

Figure 40: Call station with smoke input (shown without pull cord)

The station, which normally places a staff normal nurse call, has an input that can be connected to a smoke detector. If connected to a

smoke detector that activates, the call station places a high-priority room alarm nurse call. When the smoke detector alarm ends, the high-priority nurse call clears.

1. Press the Call button (or pull the optional cord) on the call station to send a staff normal call to staff consoles and annunciators.

   Pressing the Call button (or pulling the cord) causes the following to happen:

   - lights by the station's Call button and by any linked Call buttons turn on to confirm nurse call placement.
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Associated corridor and zone lights show a Input (shown without pull cord) steady white.
   - Tones sound at staff consoles and unit annunciators, and at stations with staff follow active.
   - A staff normal nurse call row appears on the Call screen on staff consoles and unit annunciators.

   Note: A staff normal call is cleared from the system when a staff member answers the call at a staff console or annunciator.

2. To cancel a call from the model HC-PB2-CALLIN call station (that was not already cleared by a staff member answering the call), press Cancel on the originating call station, or a linked Cancel button on any associated patient or staff room station.

   - Call button lights extinguish
   - Dome lights extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The nurse call row disappears from staff consoles and annunciators.

   If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:

   - Dome light display of the staff level reminder ceases.
   - The reminder row disappears from staff console or annunciator Reminders screens.

Call stations with relay

The model HC-PB2-CALLR call station is a generic nurse call station. This station may be equipped with a pull cord, may be a standalone station, or may be associated with a patient or staff/duty station. The call station may be installed in patient rooms or other rooms where patients are temporarily located, such as exam or recovery rooms. It may also be located in staff rooms. The station, which

places staff normal calls, has no audio capability, and cannot be used to communicate with staff members at staff consoles or annunciators.

Figure 41: Call station with relay (shown without pull cord)

The model HC-PB2-CALLR call station has a latching relay that can be used to start an elapsed timer, such as what is used on a cardiac arrest clock. Other uses at your facility may include lighting dome lights by patient bathrooms, releasing locks on intensive care unit doors to provide easier access for emergency personnel, or triggering automated announcements over a facility's loudspeaker system.

Caution: The relay contact is pulsed to flash the passive dome light. This may not be appropriate for use with other devices.

1. Press the Call button on the call station (or pull the cord) to send a staff normal call to staff consoles and annunciators.

   Pressing the Call button (or pulling the cord) causes the following to happen:

   - lights by the station's Call button and by any linked Call button turn on to confirm nurse call placement
   - The call assurance tone sounds at any associated patient or staff/duty station.
   - Associated corridor and zone lights show a steady white.
   - Staff normal tones sound at staff consoles and unit annunciators, and at stations with staff follow active.
   - A staff normal nurse call row appears on the Call screen on staff consoles and unit annunciators.

   Note: A staff normal call is cleared from the system when a staff member answers the call at a staff console or annunciator.

2. To cancel a call from this station (that was not already cleared by a staff member answering the call), press the Cancel button on the originating call station, or on any associated patient or staff room station.
   - Call button lights extinguish.
   - Dome lights extinguish.
   - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
   - The nurse call row disappears from staff consoles and annunciators.

   If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:
   - Dome light display of the staff level reminder ceases.
   - The reminder row disappears from staff console or annunciator Reminders screens.

Remote cancel stations

The model HC-PB3-Cancel remote cancel station (see Figure 42 on page 109) lets you cancel nurse calls from convenient locations in patient or staff rooms, instead of trying to press a Cancel button at a patient or staff/duty station that is blocked by medical equipment. When a remote cancel station's Cancel button is linked with other associated stations for a bed or a room, all calls placed from the bed or room can be immediately canceled from this station.

Figure 42: Remote cancel station (model HC-PB3-Cancel, shown without pull cord)

A remote cancel station is typically associated with a patient station, or other peripheral stations. The station, which can be equipped with a pull cord, may be installed in patient rooms or other rooms

where patients are temporarily located, such as exam or recovery rooms. It may also be located in staff rooms associated with Smart Staff/Duty Stations.

A remote cancel station's sole function is cancellation of nurse calls; it does not place nurse calls. The station has no need for an audio capability, and cannot be used to communicate with staff members at staff consoles or annunciators.

1. Press the Cancel button on the remote cancel station (or pull the cord) to cancel a call placed from an associated bed or room station. Pressing Cancel causes this to happen:
    - Any associated stations' Call button lights extinguish.
    - Dome lights extinguish.
    - Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.
    - One or more nurse call rows disappear from staff consoles and annunciators.
    - If the nurse call had a reminder set for it, the following happens when the Cancel button is pressed:
    - Dome light display of the staff level reminder ceases.
    - The reminder row disappears from staff console or annunciator Reminders screens.

Dual auxiliary input stations

Telligence auxiliary input stations expand the number of auxiliary input 1/4-inch jacks present in the patient room, supplementing those on the patient station, and allowing connection for additional medical equipment such as ventilators, pulse oxymeters, infusion pumps, IV drip monitors, and so on.

Figure 43: Isolated dual auxiliary input station (HC-AUX2-ISO, shown without connectors)

The stations have two labels (*not* buttons) that identify the type of device which can be attached to each jack (default labels appear in Figure 43, above, and Figure 44, on page 112). When an attached device signals an error, the corresponding light lights.

There are two types of auxiliary input stations:

- The HC-AUX2-ISO Isolated Dual Auxiliary Input Station (see Figure 43 on page 111) permits connection of either electrically isolated or non-isolated, latching equipment. The station's own electrical isolation prevents any attached device's electrical problems from affecting the Telligence system.
- The HC-AUX2 Dual Auxiliary Input Station (see Figure 44 on page 112) allows for the connection of electrically isolated, latching medical equipment only.

Caution: Only monitor devices that are UL 544 or UL 60601-1 listed, that maintain dry contacts when in alarm mode, that are electrically isolated, and that have standard 1/4-inch (0.64 cm) diameter phone plugs, should be plugged into the HC-AUX2 station.

When an error occurs causing an attached device to enter alarm mode, the device must stay in alarm mode until the problem is resolved. To stay in alarm mode until problem resolution, equipment connected to an auxiliary input station must latch.

When a monitored device is in alarm mode, or when it is disconnected, the auxiliary input station places a cord pull call to staff consoles and annunciators.

Note: One or more stations equipped with Cancel buttons must be associated with auxiliary input stations, to handle cord pull situations.

For more about cord pull situations, see "Canceling calls placed from call cords or bed buttons" on page 76, and "Connecting call cords and auxiliary medical devices" on page 79.

When an auxiliary input station places a nurse call:

- The light under the equipment's label turns on to confirm nurse call placement.
- The light by any linked Call button turns on to confirm nurse call placement.
- Top light sections on corridor and zone lights fast flash amber.
- Auxiliary emergency tones sound at staff consoles and unit annunciators, and at stations with staff follow active.
- An auxiliary emergency nurse call row appears on staff consoles and unit annunciators.

Note: Telligence provides for eight auxiliary emergency nurse call types, which may be renamed at system configuration time to specify actual medical equipment.

Figure 44: HC-AUX2 Dual auxiliary input station (shown without connectors)

To cancel an auxiliary equipment emergency call, staff resolve the problem that caused the call by resetting the equipment or other methods, and reinsert the device into the station. Once the problem is resolved, the auxiliary emergency nurse call self-cancels.

- The station's equipment label light extinguishes.
- Any associated station Call lights extinguish.
- Dome lights extinguish.
- Tones stop sounding at staff consoles and annunciators, and at stations where staff follow is active.

- The nurse call row disappears from staff consoles and annunciators.

If the auxiliary emergency call had a reminder set, this also happens:

- Dome light display of the staff level reminder ceases.
- The reminder row disappears from staff console or annunciator Reminders screens.

Cleaning staff stations

Cleaning mode temporarily deactivates station buttons so associated stations can be cleaned without danger of changing the status of nurse calls during the cleaning process.

Note: Stations cannot be used to place nurse calls while they are in cleaning mode; if cleaning stations in a patient room, it may be best to clean them when no patients are occupying beds in the room.

Clean Smart Staff/Duty Stations and peripheral staff stations as follows:

1. Ensure that all calls on associated staff stations have been canceled.
2. Spray or soak a soft cloth with the disinfectant typically used by your facility's maintenance staff (e.g., Sidex, Staphine, or a 10% bleach/water solution).
3. Ensure that the station to be cleaned is idle (no LIGHT should be lit or flashing).
4. Press and hold down the staff/duty station's Cancel button for about 4 seconds.
   - The staff/duty station emits two feedback tones while you are holding down the Cancel button.
   - The station and any associated stations enter a 15-second cleaning mode period. During this time, the Cancel light at the staff/duty station flashes, and on peripheral devices all lights flash (including the back light).

   Notes

   - A different amount of time for cleaning mode may be configured at your facility.
   - If not finished cleaning a station by the time the Cancel light stops flashing, put the station into cleaning mode again.
5. Gently wipe the surface of the station with the damp cloth.
6. Clean any associated cords using the damp cloth.
7. Use another soft, dry cloth to wipe the station's surface dry.

   Notes

   - Microfiber cloth is recommended for cleaning Telligence stations.
   - Do not use abrasive cleaning agents.
   - Do not soak any cords that may be present.

Resolving staff station problems

Resolutions to some problems that may occur at staff/duty or staff-operated stations are described below.

Errors at staff-operated stations

If a patient, staff/duty, or peripheral station in a patient or staff room malfunctions in some manner, the patient or staff/duty station indicates the error by a fast flashing red Status light. The flash rate indicates the type of error.

To resolve a staff-operated station error:

- For about 8 seconds, press the patient or staff/duty station Cancel button, or any linked Cancel button in the patient room.
- Four feedback tones sound and all patient or staff/duty station lights fast flash for 3 seconds.
- Device error nurse call rows momentarily appear on staff consoles and annunciators, accompanied by momentary fast beeps.

Note: Holding down a patient or staff/duty station or linked Cancel button for 8 seconds clears all calls from the room that are currently in the system, clears associated room devices, and causes associated dome lights to extinguish.

If pressing Cancel for 8 seconds does not resolve the problem, contact the GE Security Technical Services Department at 1-800-385-2639 during normal business hours.

Inability to remove presence

Presence stations do not have Cancel buttons, which might make it seem difficult to remove presence — if you already have pressed the presence station button corresponding to your staff level, but your presence remains registered. Staff follow tones keep on sounding at Smart Staff/Duty Stations when your presence continues to be registered.

To remove a "stuck" presence:

1. For about 6 seconds, press the patient or staff/duty station's Cancel button, or any linked Cancel button.
    - Three feedback tones sound and the Cancel light flashes.

If pressing the Cancel button for 6 seconds does not clear a "stuck" presence, contact the GE Security Technical Services Department at 1-800-385-2639 during normal business hours.

Chapter 6
Dome lights

Summary

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Overview

The Telligence System dome lights provide bright, easily understood, visual annunciation of nurse calls — ensuring a quick response on the part of facility caregivers. The more urgent a nurse call is, the faster Telligence dome lights flash. Telligence Infinity series dome lights, typically located in facility hallways, provide instant visual cues to the type and source of nurse calls placed on the Telligence System.

Telligence dome light colors and flash rates indicate the various nurse call types and priorities. Each light section in a dome light can be programmed to illuminate in one of nine possible colors: blue, red, white, amber, green, pink, cyan, magenta, or yellow. Dome light section colors indicate nurse call types and priorities, as well as registered presence staff levels and staff levels assigned when nurse calls are put on reminder.

When calls have been placed on reminder, Telligence dome lights' bottom light sections slowly flash. Registering presence, also shown in a dome light section, hides reminders that are at the presence level and lower; if calls have not been canceled after presence is removed, the dome light sections start slowly flashing again.

One model of Infinity dome lights, used for supervision purposes, provides both visual and audible annunciation. This dome light alerts staff with steady, slow, or fast tones and flashing lights. When a supervisory dome light sounds a tone, it indicates power and data interruption to a staff console or annunciator. Dome light visual and auditory indicators are configurable according to the needs of the facility.

Notes

- The term "dome light," as used in this manual, is used to generically identify corridor lights, zone lights, nurses' station supervisory lights, and even passive dome lights mounted by bathroom doors inside patient rooms.
- For information on available models, see "Dome light models" starting on page 122

Dome light activation

Dome lights are only as smart as the devices that drive them. By themselves, even the intelligent Infinity series dome lights can accomplish only basic functions, such as turning on and off a given color in a light section or generating an auditory tone.

Intelligent dome light signaling

Staff consoles, annunciators, patient stations, Smart Staff/Duty Stations, and peripheral stations like staff emergency stations, presence stations, and call stations in patient or staff rooms all drive intelligent dome lights.

Nurse calls are typically initiated, and sometimes upgraded, at patient or staff stations. Calls can also be initiated, upgraded, and put on reminder at staff consoles and annunciators. Whether it is a patient or a staff member pressing buttons or pulling cords at patient and staff stations, or a staff member working at a staff console, sections in intelligent dome lights function in these ways as a result:

- Illuminate in a color signaling the nurse call type
- Illuminate steadily or flash in various rates, as follows:
    - Flashing for a dome light error
    - Fast flashing for an emergency call
    - Slow flashing for a lower priority nurse call that is still cause for concern, or for a call that is on reminder
    - Steadily for a normal priority request
- Change color and change from steady illumination to a slow flash, or from a slow flash to a fast flash, when a nurse call is upgraded
- Steadily illuminate in a color signaling a staff level presence registered for a room
- Illuminate in a color signaling the highest staff level priority assigned when a nurse call is put on reminder

What dome light sections signal

The top light section in 2-section dome light models, and the top two light sections in 4-section dome light models, are devoted to annunciation of nurse call types, via designated colors flashing at designated rates. The top two sections in a 4-section dome light may illuminate simultaneously. With more than one call type to display in one light section, the highest priority nurse call is shown. In a 2-section dome light, the bottom light section shows presence or reminder staff levels. In a 4-section dome light, the third light

section from the top shows presence staff levels, and the bottom light section shows reminder staff levels.

Simple dome light signaling

Passive dome lights can be configured to illuminate steadily or to flash. A passive dome light inside a patient room (typically by the bathroom door) requires the HC-PP-LAV lavatory station or the HC-PB2-CALLR call station, both of which have timers and latching relays that work with passive dome lights. With these stations, when the patient presses a button or pulls a cord, the associated passive dome light illuminates in red. Each station's latch then keeps the passive dome light on until the call is canceled.

Note: Stations that light passive dome lights are usually configured to also cause associated corridor lights to illuminate in the color designated for the nurse call, and to either flash at the designated rate or glow steadily. Because corridor and zone lights do not have latches and timers, staff members must still press the Cancel buttons at lavatory stations to cause associated corridor and zone lights to extinguish.

Nurse call dome light signaling

By default, nurse calls are signaled in dome lights as shown below.

Table 7: Dome light signaling for nurse call types

Nurse call priority type [1]	Quad dome light section	Dual dome light section	Dome light color	Dome light flash rate
Room Alarm (2)	ALL	ALL	Red	Fast
Code Blue	ALL	ALL	Blue	Fast
Code Pink	ALL	ALL	Pink	Fast
Staff Emergency (2)	1	1	Red	Fast
Lavatory Emergency	1	1	Red	Fast
Urgent	1	1	Red	Fast
Auxiliary Emergency (8)	1	1	Amber	Fast
Patient Emergency (2)	1	1	Amber	Fast
Auxiliary Priority (5)	2	1	Amber	Slow
Patient Priority (2)	2	1	Amber	Slow
Bed Exit	2	1	Amber	Slow
Cord Pull (2)	2	1	Amber	Slow
Patient Normal	2	1	White	Very Slow
Family	2	1	White	Very Slow

Nurse call priority type [1]	Quad dome light section	Dual dome light section	Dome light color	Dome light flash rate
Staff Normal	2	1	White	Very Slow
Housekeeping	2	1	White	Very Slow
Presence 1 (RPN)	3	2	Red	.
Presence 2 (LPN)	3	2	Amber	.
Presence 3 (Aide)	3	2	Green	.
Reminder 1 (RPN)	4	2	Red	.
Reminder 2 (LPN)	4	2	Amber	.
Reminder 3 (Aide)	4	2	Green	.

[1] If more than one instance of a call type can be configured, the number of instances appears in parentheses, e.g., Cord Pull (2); 1 = Top light section, 4 = Bottom light section (in a dual dome light, 2 = Bottom light section).

Dome light models

Dome lights used in the Telligence nurse call system can have one, two, or four light sections. Telligence dome light models include:

Table 8: Telligence Dome Light Models

Model	Description
HC-CL1-RED	One-section dome/zone light
HC-CL2	Infinity Series two-section dome/zone light
HC-CL4	Infinity Series four-section dome/zone light
HC-CL4-SUPV	Supervision four-section dome/zone light with buzzer

Notes

- Use the HC-CL4-SUPV dome light for supervision only. The buzzer is better suited for staff console or annunciator trouble alerts only.
- To signal dome light alarm conditions, a separate yellow light behind the top light section of all 2- and 4-section dome lights illuminates more faintly than nurse call indicator lights.

Corridor lights

Corridor lights are intelligent lights with visual indicators that signal nurse call types and priorities. Corridor lights, mounted outside patient or staff rooms in facility hallways, indicate conditions inside patient or staff rooms.

Two Infinity series dome light models can be used as corridor lights:

- The HC-CL2 Infinity dome/zone light has two light sections. Each section is programmed to display one of nine possible colors: blue, red, white, amber, green, pink, cyan, magenta, or yellow. The top section in a two-section dome light annunciates the highest nurse call event for the patient or staff room associated with the light. The bottom dome light section annunciates registered presence or a nurse call reminder.
- The HC-CL4 Infinity dome/zone light has four light sections, each of which is programmed to display one of nine possible colors: blue, red, white, amber, green, pink, cyan, magenta, or yellow. The top light section in a four-section dome light annunciates higher priority nurse calls, the second light section down annunciates lower priority nurse calls, the third light section down shows any registered presence, and the bottom light section indicates placement of any nurse call reminder for the associated patient bed/room or staff room.

The HC-CL4 Infinity dome/zone light appears below.

Figure 45: HC-CL4 Dome light with its four light sections

Zone lights (Model HC-CL4-SUPV Supervision Dome/Zone Light with Buzzer)

Zone lights, like corridor lights, are intelligent dome lights used for locating the sources of nurse calls. While corridor lights typically pinpoint the room where the call was placed, zone lights show the zone in which the room is located.

Zones may or may not coincide with duty areas. Facilities typically mount zone lights at hallway entrances and in spots where nurses' station staff do not have direct line-of-sight views of corridor lights. They are typically placed within sight of nurses' stations in order to readily convey conditions prevailing in their areas.

Supervisory lights

If a Telligence System (LAN) has more than one staff console or annunciator and a staff console or annunciator stops functioning, error messages will appear at the other staff consoles and annunciators (if so configured). When power and data supervision is performed by other staff consoles and annunciators, supervisory dome lights may not necessarily be installed near staff consoles and annunciators, as they would be superfluous.

However, if your Telligence System has only one staff console or annunciator, or if staff consoles and annunciators are located on separate floors or are more than 25 feet (7.5 meters) apart, HC-CL4-SUPV dome lights may be installed near and associated with each staff console or annunciator. The dome lights will flash and also sound a tone if the flow of power and data to the staff console or annunciator is interrupted.

The HC-CL4-SUPV supervision dome/zone light with buzzer may be located near a staff console or annunciator to alert staff if the device fails. The HC-CL4-SUPV dome light's four light sections fast flash white and sound tones in time with the flashing of its lights to signal loss of power, and consequent loss of data, to the device. The supervision dome light is required to maintain compliance with UL 1069.

Passive dome lights

Dome lights located inside patient rooms (typically near bathroom doors) are called passive dome lights, since they perform only simple notification functions, turning on as a result of a button press or a cord pull, and turning off after the button or cord pull has been cancelled.

The HC-CL1-RED dome/zone light model is used for passive dome lights. It has a single red light section and is non-configurable. The HC-CL1-RED dome/zone light can be located any place where secondary visual call annunciation is needed.

Dome light alerts

Multi-section dome lights may be configured to display a variety of colors as well as to provide constant illumination or flash at a number of rates. Single-section dome lights provide a flashing or steady red light depending on their configuration.

Indicator colors

Possible dome light colors are as follows:

- Two-section and four-section dome light colors — blue, red, white, amber, green, pink, cyan, magenta, and yellow
- Single-section dome light color — red

Flash repeat rates

Dome lights can light steadily or flash repeatedly at these rates:

- Flash = 1/16 sec on, 1/16 sec off
- Fast flash = 1/4 sec on, 1/4 sec off
- Slow flash = 1 1/2 sec on, 1/2 sec off
- Steady (no flash)

Note: Two-section and four-section dome lights have a dim yellow light in the top light section to signal dome light error status. This fainter light signals non-communication of the dome light with the network via flashing yellow light, and signals an unconfigured status with one second of a flashing yellow light, one second off. When the dome light's status becomes normal, the dome light extinguishes.

Buzzer repeat rates

the HC-CL4-SUPV dome light buzzes at the same rate that it is flashing.

Appendix A
Wireless phones and pagers

Summary

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Overview

Depending on how the Telligence System has been configured at your facility, any nurse call — whether initiated at a patient or staff/duty station, at a peripheral nurse call station, or even at a staff console or annunciator — can be transmitted to the facility's wireless phones and/or pagers. You can respond to paged messages and use their wireless phones to answer calls from and make calls to Telligence patient stations, Smart Staff/Duty Stations, staff consoles and annunciators.

Note: Patients and staff cannot make "outside" calls from patient stations, Smart Staff/Duty Stations, staff consoles or annunciators. That is, these Telligence devices cannot be used to call home or to call any number that is not a facility number.

Usually wireless phone systems that permit staff to answer nurse calls also let them decline calls when unable to answer them. These calls will still appear at staff consoles and annunciators, and may be routed to other caregivers, if your system is set up to do so.

If you hear a busy tone when answering a nurse call, it means that the audio path is already in use. At this point, it may be faster for you to go directly to the room where the call originated, just as you would if you received a pager message. Otherwise, it may be possible for you to wait for the call to ring again.

When you answer a call from a patient station using a wireless phone, the nurse call is canceled from the Telligence System if it is a normal priority call. For all other nurse call priorities, you must go to the patient's room and press the station's Cancel button (or a linked Cancel button in the room) to cancel the call.

Note: Your facility may want to avoid canceling normal priority nurse calls from wireless phones altogether, because doing so voids the Telligence System's UL Listing. As a result, the system installer may have configured patient stations' patient-initiated calls — from smart pillow speakers, call cords and electronic bed buttons — to have priorities of patient priority or patient emergency, instead of patient normal priorities.

Caution: The Telligence System's UL Listing may be voided if normal priority calls are canceled by staff members using wireless telephones. Normal priority calls should be canceled only at staff consoles or annunciators, or at the patient room.

Wireless phones and pager systems

Your facility may have chosen one or more of the following wireless phone systems and/or paging systems or technologies:

- SpectraLink wireless phone system
- One of many third-party paging systems
- Both the SpectraLink wireless phone system and a third-party pager system
- Emergin Communications Gateway, beyond which multiple communications solutions may be in place

SpectraLink wireless phone system

Because staff members at many facilities already use SpectraLink wireless handsets to answer ProCare 6000 nurse calls, it is anticipated that staff members at these facilities will want to use SpectraLink wireless handsets to answer Telligence nurse calls as well.

When used with ProCare 6000, SpectraLink's Link 150, Link 3000, and NetLink handsets make a distinctive ring tone when receiving a nurse call — distinguishing these calls from calls made from regular phones or other wireless phones. SpectraLink also has a vibrate-alert feature for its handsets which permits signaling of incoming calls in facility quiet zones.

Instructions for using SpectraLink phones are provided in the SpectraLink instruction manual included with your Telligence system.

Third-party paging systems

Like ProCare 6000, Telligence can be configured so that nurse calls automatically page staff members who need to be alerted about calls from or about patients in their duty areas when they are attending to duties away from the nursing unit staff console.

If you have a pager that can receive nurse calls, ask your supervisor for information as well as for user documentation for the pager.

Using systems via the Emergin Communications Gateway

For use with Telligence only, or for use with both ProCare and Telligence, your facility may have chosen to use wireless phone systems like Vocera, pager systems, and/or other communications solutions enabled by the Emergin Communications Gateway. Both nurse call systems communicate with the Emergin Communications Gateway by means of the Pocket Page Bridge.

For operations information, please refer to the documentation provided by the manufacturer.

Glossary

Term	Definition
Analog Station	An analog station that supports audio (Analog Patient Station, Analog Staff Station).
Annunciator	Similar to a Staff Console, except wall mounted.
Bed Interface Device	Device that provides an interface to a Hill-Rom or Stryker Bed Station.
BID	Bed Interface Device
DL	Dome light. Also called a room light, corridor light, or zone light.
IP	Internet protocol. A communication protocol developed by the IETF (Internet Engineering Task Force) that enables information to be routed from one network to another in packets and then reassembled when they reach their destination.
Patient Station	A device used by a patient to signal or communicate with healthcare staff.
PD	Peripheral device. An RVPD, SVPD, or legacy fire alarm Signature device that does not support audio.
Presence station	A peripheral station for manually registering and clearing staff presence in a room
PSpkr	Dukane Pillow Speaker with 18-pin connector equipped with lighting, TV control and Nurse Call buttons.
SC	Staff console
Staff Console	A device used by healthcare staff to communicate with both healthcare staff and patients. It is the primary device that annunciates and answers calls from Staff/Patient Stations and signals alerts from healthcare equipment and devices within the facility connected to the Telligence Patient-Staff Communication System. This device sends and receives both data and voice over an IP network.
Staff Station	A device used by healthcare staff to signal or communicate with other healthcare staff. In Duty mode, it annunciates calls within the designated duty area(s).